SITE ASSESSMENT REPORT

PROPOSED LYNWOOD SPRINGS RETAIL CENTER 11600 LONG BEACH BLVD. LYNWOOD, CALIFORNIA (LARWQCB FILE NOS. R-23001 AND R-12239)

April 21, 2003

Prepared for:

The City of Lynwood Redevelopment Agency 11330 Bullis Road Lynwood, CA 90262

For Submittal to the Los Angeles Regional Water Quality Control Board

> Prepared by: Winefield & Associates 110 Pine Avenue, Suite 900 Long Beach, CA 90802

> W&A Job No. LYN-06-202

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No. 18554 Exp. 6/30/05



City of LYNWOOD

A City Meeting Challenges

11330 BULLIS ROAD LYNWOOD, CALIFORNIA 90262 (310) 603-0220



OFFICE OF THE CITY MANAGER

May 13, 2003

VIA FEDERAL EXPRESS

Ms. Bobbie Kahan Brownfields Coordinator US EPA Region 9 (SFD-1-1) 75 Hawthorne Street San Francisco, CA 94105

Dear Ms. Kahan:

SUBJECT: SITE ASSESSMENT REPORT

PROPOSED LYNWOOD SPRINGS RETAIL CENTER

Enclosed please find the Site Assessment Report submitted for the above project for your review.

Should you have any questions or concerns, please do not hesitate to contact me at (310) 603-0220, extension 617.

Sincerely,

Autra Adams Special Assistant

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April 21, 2003

Prepared for:

Ms. Shirley Wolf

The City of Lynwood Redevelopment Agency
11330 Bullis Road
Lynwood, CA 90262

For Submittal to the Los Angeles Regional Water Quality Control Board

Prepared by:
Winefield & Associates
110 Pine Avenue, Suite 900
Long Beach, CA 90802

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1.0 INTRODUCTION

This report summarizes additional site assessment and groundwater monitoring and sampling activities at the proposed Lynwood Springs Retail Center, located at 11600 Long Beach Blvd., Lynwood, California (site). The site is located on the east side of Long Beach Blvd. and just south of the Glenn Anderson 105 Freeway (Figure 1). Site assessment and groundwater monitoring and sampling were performed by Winefield & Associates (W&A) and Ninyo & Moore (N&M) under the supervision of a W&A Registered Geologist and an N&M Professional Engineer.

The site assessment was performed to further assess the extent of chlorinated hydrocarbon contamination in the soil and groundwater, to obtain data for use in the development of a human health risk assessment, and to assess the physical distribution of the separate phase petroleum hydrocarbon plume beneath the site. The City of Lynwood Redevelopment Agency contracted W&A to prepare a Work Plan for the completion of additional assessment of subsurface contamination at the site. The Los Angles Regional Water Quality Control Board (LARWQCB), in a letter dated February 4, 2003, approved the *Work Plan for Site Assessment, Feasibility Study and Preparation of Remedial Action Plan* prepared by W&A dated December 9, 2002 and an addendum to the Work Plan. A copy of the LARWQCB letter is included in Appendix A for reference. The Work Plan included a Sampling and Analysis Plan, which was conditionally approved by Region IX of the Environmental Protection Agency.

The site is located on the east side of Long Beach Boulevard and extends south from the south side of the 105 Freeway to Josephine Street (see Figure 1). The site is currently composed of a number of individual properties that include residences, a strip mall that includes a former dry cleaner and a retail gasoline station, an existing restaurant, and a U-Haul vehicle rental facility. Figure 2 shows the current layout of the site. Those portions of the site between the 105 Freeway and Louise Street are referenced as the "Garfield Express Property" throughout this report. Those portions of the site between Louise Street and Josephine Street are referenced as the "U-Haul Property" throughout this report.

2.0 BACKGROUND INFORMATION

A site background summary is included in W&A's Work Plan for Site Assessment, Feasibility Study and Preparation of a Remedial Action Plan, dated December 9, 2002.

3.0 REGIONAL AND SITE-SPECIFIC GEOLOGY AND HYDROGEOLOGY

The regional information is presented in the previous W&A Work Plan dated December 9, 2002. Previously constructed cross-sections of borings at the site have revealed interbedded clay, sand and silt layers from ground surface to about 15 feet bgs. Sediments generally become finer as they approach 15 feet bgs below which the sediment consists predominantly of silt and clay interlayered with smaller lenticular deposits of sand. This zone of fine-grained sediment extends to a depth of about 25 to 30 feet bgs across the site and appears to be undulatory in nature, i.e., the depth to the bottom of the finer-grained sediment varies laterally.

The upper saturated zone underlies the silt-clay zone and consists predominantly of extensive deposits of poorly graded sand and silty sand. This coarse-grained zone appears more uniform and continuous beneath the northern portion of the site, while toward the south it becomes interlayered with silt and clay. Subsurface sediments appear to be markedly lenticular and highly variable when viewed in the east-west cross-sections and are more uniform and elongated when viewed north to south, thus echoing an overall linear trend of fluvial and alluvial fan deposition across the regional slope from north to south.

Drilling and well installation at the site have shown that first occurrence of groundwater occurs at a depth of about 25 feet bgs. Groundwater in wells generally stabilizes at about one to five feet above where it is first encountered during drilling, suggesting that it is under variable or discontinuous confining pressure resulting from the heterogeneity of the shallow sediments.

The saturated zone beneath the site generally consists of poorly graded sand and silty sand that is directly overlain by predominantly finer-grained sediments consisting mainly of silt and clay. The contact between the upper surface of the aquifer and the overlying aquitard appears to extend across the entire site, however, given the lateral and vertical heterogeneity of sediments beneath the site, the characteristics of that confining contact also vary laterally. The lithology of the aquifer beneath the northern portion of the site appears to be more uniform sand than the southern portion where the sand becomes interlayered with silt and clay. First-encountered groundwater coincides generally with the contact of the bottom of the silt/clay zone and the top of the underlying sand.

The observed variation in confining conditions across the site (i.e., the depth of first-encountered groundwater versus the height of the stabilized level of groundwater in wells) may be based on several

factors, including the depth to the bottom of the overlying aquitard, the permeability of the aquitard, the screened interval of each well in the saturated zone, and the precision of field observations during drilling. The aquitard overlying the sand aquifer is laterally heterogeneous and confining conditions are expected to be variable as well as discontinuous both laterally and seasonally over time.

4.0 PRE-FIELD ACTIVITIES

Prior to beginning field work at the site, W&A submitted an Application for Well Permits and Service Request Application to the Los Angeles County Department of Health Services (LADOHS) and obtained approval from the LADOHS to proceed with well installation. A copy of the approved document is included in Appendix B. On January 31, 2003, a W&A technician visited the site to pre-mark drilling locations. W&A then notified Underground Services Alert for underground utility clearance. The City and the LARWQCB were also notified in advance of the field work.

5.0 DRILLING, SOIL SAMPLING AND WELL INSTALLATION

On February 10 and 11, 2003, and March 3 and 4, 2003, W&A geologists supervised the drilling and soil sampling of four off-site borings for installation of groundwater monitoring wells W&A-MW-1 through W&A-MW-4, three onsite borings for installation of vapor extraction wells W&A-HVW-1 through W&A-HVW-3, and four onsite soil borings (W&A-SB-1 through W&A-SB-4) for lithologic and contaminant analysis. Figure 2 shows the boring and well locations. In keeping with W&A's safety protocol, the soil borings were each hand augered to an appropriate depth prior to commencement of mechanical drilling.

Drilling was performed by Prosonic Corporation using CME-75 hollow-stem-auger drilling rigs. Each boring was drilled and sampled to a maximum depth of 46.5 feet for the groundwater monitoring wells, 23.0 feet for the vapor extraction wells, and 36.5 feet for the soil borings using 8-inch outer-diameter augers. All down-hole drilling and sampling equipment was either pressure washed or triple rinsed prior to being introduced to the subsurface.

Soil samples were collected during drilling at approximately 5-foot depth intervals in the vadose and saturated zones using a 2-inch diameter, 18-inch long split-barrel sampler inside the hollow stem augers.

The lithology of the borehole was logged by the W&A geologist using the Unified Soil Classification system (USCS). A field photoionization detector (PID) was used to screen soils for the presence of volatile organic compounds (VOCs). Drill logs that were prepared from field notes recorded during drilling are presented in Appendix C. The logs provide a summary of the sample collection and retrieval intervals, lithology and PID readings from the boreholes.

Undisturbed soil samples were collected into 2-inch diameter, 6-inch long stainless steel rings that were placed into the 18-inch split-barrel sampler. The sampler was driven into the undisturbed soil at the bottom of the borehole by hammering it after the borehole was drilled to the top of the desired sampling depth. Soil samples were selected for laboratory chemical analysis based on specifications within the W&A Work Plan and Sampling and Analysis Plan. Soil samples were also selected pursuant to field assessments of PID readings and proximity to the water table.

Soil samples were collected for laboratory analysis from undisturbed soil in selected sample rings using the EPA 5035 sampling technique. An En Core® sampler and containers were used to package the samples. Upon retrieval of each soil sample from the borehole, soil from the stainless steel rings was collected into 5-gram En Core® sample containers and immediately sealed, labeled and placed into a cooler on ice for transport to a State-certified laboratory for chemical analysis. Selected soil samples were also packaged for duplicate laboratory analysis.

Soil sample rings were also packaged for laboratory analysis by taking sample rings from the split-barrel sampler and sealing at both ends by Teflon® sheeting and end caps. Each ring was labeled with identification information, placed into a sealable plastic bag and placed into a cooler on ice.

Soil in the remaining stainless steel rings was used for visual inspection, lithologic logging, and field headspace readings for VOCs. Headspace readings were obtained by placing soil into a sealable plastic bag and agitating the soil. The PID probe was then inserted into the bag to screen the headspace air for the presence of volatile organics. Sampling intervals and headspace readings are recorded on the drill logs (see Appendix C).

All packaged soil samples were labeled in the following manner: "W&A" to denote "Winefield & Associates", followed by either "MW" to denote "monitoring well", "HVW" to denote "high vacuum well", or "SB" to denote "soil boring" followed by the well number, followed by a hyphen and the

sample collection depth. For example, sample "W&A-MW-2-35" denotes a sample collected from well W&A-MW-2 at a depth of 35 feet. Duplicate samples were labeled with the same designation as the EPA Method 5035 samples followed by "D". Quality assurance equipment blanks ("rinsates") were collected every day of soil sampling for verification of adequate sampling equipment field decontamination. The rinsate samples were labeled W&A-ER-1 through W&A-ER-2. Temperature blanks consisting of a 40-ml vial of clean water were placed into each sample cooler for the measurement of sample temperature upon receipt of the samples by the lab. The temperature blanks were labeled #1 through #5.

A 2-inch diameter Schedule-40 PVC groundwater monitoring or high vacuum well was installed into each of the 7 borings for W&A-MW-1 through W&A-MW-4 and W&A-HVW-1 through W&A-HVW-3. The wells were installed to depths ranging between 23 feet bgs (HVW) and 46.5 feet bgs (MW). Groundwater adjacent to the site was initially encountered at approximately 23 to 26.5 feet bgs during drilling. The groundwater monitoring wells were constructed using 30 feet of screen from the bottom of each boring up to approximately 15 feet bgs. The high vacuum wells were screened from approximately 18 to 23 feet bgs. The drill logs in Appendix C contain construction details of the wells.

Each groundwater monitoring well was developed by surging and bailing approximately 30 to 50 gallons of water after the filter (sand) pack was installed around the screen. Initial well development was performed to settle the filter pack and to remove fine sediment from the well.

Soil cuttings generated during drilling and soil sampling, well development water and water used to clean drilling and sampling equipment (decon water) were placed into 55-gallon drums that were sealed and stored on site. A Non-Classified Waste label was affixed to each drum pending laboratory analysis of collected soil samples.

6.0 POST-DRILLING ACTIVITIES

Upon receipt of the laboratory analytical results, W&A arranged the removal of the drummed soil cuttings, and decontamination/purge water from the site for disposal by a licensed waste hauler. All drummed waste was disposed of at Crosby & Overton in Long Beach, California. Copies of the waste manifests for the transport and disposal of these materials are included in Appendix D.

7.0 CPT/ROST BORING AND SAMPLING ACTIVITIES

On February 24 and 25, 2003, N&M conducted Cone Penetrometer Testing with the Rapid Optical Screening Technique (CPT/ROSTTM) on site and off site to obtain information on the petroleum hydrocarbon product thickness and distribution in the subsurface. CPT/ROSTTM locations (R-1 to R-17) are shown on Figure 4. CPT is a proven method for rapidly evaluating the physical characteristics of unconsolidated soils. It is based on the resistance to penetration of an electronic instrument (cone) that is continuously advanced into the subsurface. The electronic instrument measures tip resistance and sleeve friction in tons per square foot. The combined data from the tip resistance and sleeve friction form the basis of the soil classification (e.g., sand, silt, or clay). Hand-augered soil in the first five feet of soil revealed mostly sands or silts. CPT data indicated that between 5 and 10 feet below ground surface (bgs), the soils were also predominately sands or silts. A clay layer was generally encountered between 10 and 17 feet bgs. Mostly sand or silty soil and intermittent clay lenses were encountered between 17 and 30 feet bgs. The CPT tip was driven to approximately 34 feet bgs at most of the locations. Copies of CPT logs are included in Appendix E.

The ROSTTM locations were chosen close to monitoring wells that historically had separate phase product. The most recent separate phase product thickness measurements are shown on Figure 3. Fugro Geosciences' ROSTTM Laser-Induced Fluorescence system was used to screen soils for the presence of petroleum hydrocarbons. A laser light emitted by the probe is absorbed by aromatic hydrocarbons present in the soil. This addition of energy causes the aromatic hydrocarbons to fluoresce. This fluorescence is transmitted to a detection system within the CPT rig. The fluorescence intensity is reported as a percentage of a standard emission and plotted on a graph indicating the depths at which fluorescence was observed. Copies of the ROSTTM logs are included in Appendix E.

Typically, a fluorescence of 100 to 150% indicates the presence of separate phase product in the soil. Lesser fluorescence values usually represent smearing in the capillary zone resulting from groundwater depth fluctuations. ROSTTM locations where the fluorescence was more than 100 percent were used for redefining the lateral extent of separate phase product. These locations are shown on Figure 4. The vertical content of separate phase product at ROSTTM locations that had less than 100 percent fluorescence is depicted as a zero value on Figure 4. Maximum fluorescence was observed in the one-foot thick soil layer just above the water table. Based on the ROSTTM results, separate phase product in the soil was observed to

be significantly less than the separate phase product thickness measured in nearby groundwater monitoring wells. This is mainly because separate phase product from the soil tends to accumulate on the water table inside a monitoring well. The estimated extent of the separate product plume is shown on Figure 4. ROSTTM results indicate the presence of more than 5 and 8 feet of product at R-2 and R-11 respectively. The reason for this unusually large thickness of hydrocarbon-impacted soil layer is not known. These anomalous results were not included in the following separate product volume calculations.

The waveforms generated from the ROSTTM data indicate the type of hydrocarbons present in the subsurface. At the Lynwood Springs site, the waveforms indicate that the product is gasoline. The separate phase product thicknesses revealed by ROSTTM were compared to the product thicknesses measured in the nearby groundwater monitoring wells. These comparisons are shown in Table 1. The ratio of the separate phase product thicknesses between each CPT/ROSTTM boring and a nearby groundwater well ranged from 0.02 to 0.33. These ratios do not show a consistent pattern, which may be due to ongoing bailing and skimming activities being conducted at the site.

On February 26, 2003, nine soil borings (SR-2 to SR-4, SR-6 to SR-8, SR-11, SR-15, and SR-17) were advanced near selected ROSTTM locations using a hydraulic push-type probe. The borings were advanced near ROSTTM locations where fluorescence was observed to be more than 100%. Soil samples were collected from approximately 26 feet bgs in each of the selected borings. The soil samples were analyzed for moisture content, density, porosity, and pore-fluid saturation. The analytical results are presented in Table 2. The ratio of free-product to water in the pore fluid was used to compute the free-product volume. Calculations are presented below:

Approximate area of the plume (A) = 125,700 square feet (sq. ft)

Separate phase product plume thickness (T) = 1 foot

Average porosity (n) = 42%

Average ratio of product to water (R) = 0.103

Density of product (D) = $49.12 \text{ lbs/cubic feet (ft}^3$)

Volume of product $= A \times T \times n \times R \times D$

= 267,104 lbs

Assuming 6 lbs of product (gasoline) per gallon,

Volume of separate phase product = 44,517 gallons

8.0 GROUNDWATER SAMPLING AND MONITORING

On March 17 and 21, 2003, a W&A geologist gauged, purged and sampled wells MW-4, MW-6, MW-13, MW-17, MW-19, MW-23, MW-24, MW-33, and W&A-MW-1 through W&A-MW-4. The wells were first gauged to obtain a depth-to-water reading then purged and sampled according to LARWQCB protocol. Purging consisted of removing approximately three well casing volumes of water from each well prior to collecting samples. During purging, groundwater temperature, pH and electrical conductivity were measured periodically using a field meter and recorded on Field Data Sheets. Copies of the Field Data Sheets are included in Appendix F.

Upon collection and packaging of each groundwater sample, the sample was labeled and placed on ice in a cooler for transport to a State-certified laboratory for chemical analysis. A temperature blank was also placed in each cooler for measurement of sample temperature upon receipt of the samples by the lab. The temperature blanks were labeled #5 through #8. Purge water was pumped out of the wells by a vacuum truck, manifested and transported to Crosby & Overton Waste Facility in Long Beach, California. Copies of the waste manifests for the disposal of the purged water are included in Appendix D.

Well gauging on March 21, 2003 yielded depth-to-water ranging from 22.70 feet (well W&A-MW-4) to 23.70 feet (well W&A-MW-1) below top-of-casing in the four new groundwater wells.

9.0 LABORATORY ANALYTICAL RESULTS

9.1 Soil Analytical Results

A total of thirty-three soil samples collected from the soil borings were transported with five temperature blanks to State-certified Jones Environmental Testing Laboratories in Fullerton, California and Sierra Analytical in Laguna Hills, California for chemical analysis. Samples chosen for laboratory analysis included samples collected from the near surface, the vadose zone, and the capillary fringe.

Packaged soil samples were subjected to the following analyses:

EPA Method 8260B (full suite); and/or

- EPA Method 8270C (full suite); and/or
- EPA Method 6010B (lead only).

The complete analyte compound listing for both test methods 8260B and 8270C is summarized in Table 3, and the soil analytical results are presented in Tables 4 and 5 (including quality assurance duplicate sample results). Table 6 summarizes the temperature blank measurements and the analytical results of the equipment rinsates. The complete chemical soil laboratory reports are included in Appendix G. The following "High Profile" analytes were detected:

- Lead: Lead was detected in 8 out of 14 soil samples analyzed. Detected lead concentrations ranged from 1.4 mg/kg to 24 mg/kg (sample W&A-HVW1-2).
- Benzene: Benzene was detected in 19 out of 26 soil samples analyzed (including the two QA duplicates). Detected benzene concentrations ranged from 0.019 mg/kg to 150 mg/kg (soil sample W&A-HVW1-23).
- Methyl tertiary-butyl ether (MTBE)/Oxygenates: MTBE was the only oxygenate which appeared
 in detectable amounts. MTBE occurred in 17 out of 26 soil samples analyzed (including the two
 QA duplicates). Detected MTBE ranged from 0.11 mg/kg to 3,400 mg/kg (soil sample W&AHVW1-23).
- Tetrachloroethylene (PCE): PCE was detected in 10 out of 26 soil samples analyzed (including the two QA duplicates). Detected PCE concentrations ranged from 0.0066 mg/kg to 104 mg/kg (W&A-SB2-26.5).
- Trichloroethylene (TCE): TCE was detected in 4 out of 26 soil samples analyzed (including the two QA duplicates). Detected TCE concentrations ranged from 0.0075 mg/kg to 0.046 mg/kg (soil sample W&A-SB4-11).

The other 8260/8270 analytes detected in the recent soil sampling event included Isopropylbenzene, 4-Isopropyltoluene, Naphthalene, n-Propylbenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, n-Butylbenzene, Sec-Butylbenzene, Chloroform, 1,1,1,2-Tetrachloroethane, and n-Nitrosodi-n-propylamine (see Table 5).

All of the equipment rinsates had no detectable concentrations for all of the compounds tested (see Table 6). The temperature blanks that were transported with the soil samples had temperatures ranging from 2.7 ° C to 6.1° C (one of the temperature blanks was not measured by the lab).

Due to laboratory oversight, the base reporting limits for four 8270C compounds were reported at 0.2 mg/kg, which exceeds the 8270C reporting limits listed in the Sampling and Analysis Plan. Three of these compounds (Benzo(a)pyrene, Dibenzo(a,h)anthracene, and n-Nitrosodi-n-propylamine) were to have been reported at 0.02 mg/kg, and one of these compounds (Bis(2-chloroethyl)ether) was to have been reported at 0.05 mg/kg. The laboratory was notified of this discrepancy; however, the extraction holding time had been exceeded for all samples and therefore re-extraction and re-analysis was not possible.

9.2 Groundwater Analytical Results

A total of twelve groundwater samples and three temperature blanks were transported to State-certified Jones Environmental Testing Laboratories in Fullerton, California and Sierra Analytical in Laguna Hills, California for chemical analysis. All of the samples were subject to the following analyses:

- EPA Method 8260B (full suite); and/or
- EPA Method 6010B (lead only); and/or
- TPHg (C4-C12).

Groundwater analytical results for TPHg, benzene, toluene, ethylbenzene and total xylenes (BTEX), MTBE, lead, and other oxygenates tested are presented in Table 7. The results for the other analytes that were detected are presented in Table 8. The complete chemical groundwater laboratory report is included in Appendix H. The following "High Profile" analytes were detected:

- Lead: Lead was detected in 1 out of 8 groundwater samples analyzed. Lead at a concentration of 0.022 mg/L was detected in the sample from Well MW-24.
- TPHg: TPHg concentrations were detected in 5 out of 8 monitoring wells sampled. Detectable
 TPHg concentrations in groundwater samples ranged from 51 ug/L to 32,000 ug/L (groundwater
 well sample MW-4).
- Benzene: Benzene concentrations were detected in 5 out of 12 monitoring wells sampled.
 Detectable benzene concentrations in groundwater samples ranged from 4.1 ug/L to 15,000 ug/L (groundwater well sample MW-4).
- MTBE/Oxygenates: Except for one groundwater sample containing ETBE at 71 ug/L (well MW-4), MTBE was the only oxygenate which appeared in detectable amounts. MTBE occurred in 3

- out of 12 groundwater samples analyzed. Detected MTBE concentrations ranged from 110 ug/L to 110,000 ug/L (groundwater well sample MW-4).
- Tetrachloroethylene (PCE): PCE was detected in 3 out of 12 groundwater samples analyzed.
 Detected PCE concentrations ranged from 24 ug/L to 480 ug/L (groundwater well sample MW-4).
- Trichloroethylene (TCE): TCE was detected in 7 out of 12 groundwater samples analyzed.
 Detected TCE concentrations ranged from 0.8 ug/L to 170 ug/L (groundwater well sample MW-4).

10.0 DISTRIBUTION OF CONTAMINATION

10.1 Soil Contamination

Soil analytical results for MTBE, PCE and TCE are plotted next to each soil boring location in Figure 4. MTBE, as expected, is present in elevated concentrations in unsaturated soil beneath the pump islands. It is also present at elevated concentrations in unsaturated soil at the west property line of the Garfield Express Property south of the pump islands (at boring SB-3). Two of the four vadose zone samples from borings in the east and west side of the site building contained low levels of MTBE (0.11 and 4.6 mg/kg, respectively). MTBE was also detected in capillary to saturated zone soil samples from all of the soil borings and high-vac well borings except for the sample collected at 26 feet bgs from SB-3. All four of the capillary fringe samples collected from the off-site well borings showed no detectable concentrations of MTBE.

Both PCE and TCE were detected throughout the soil column (both vadose and capillary zones) in boring SB-4 located near the southwest corner of the Garfield Express building. Farther north near the west side of the building, SB-1 contained PCE in vadose zone soils but not in the capillary fringe or saturated zone, and TCE was not found in any of those samples. PCE (and not TCE) was also detected in the saturated zone at SB-3 on the west edge of the site. All soil samples collected from the high-vac well borings at the pump islands had no detectable PCE or TCE. All four of the capillary fringe samples collected from the off-site well borings showed no detectable concentrations of PCE or TCE.

10.2 Groundwater Contamination

Figures 5, 6 and 7 are site plans showing dissolved phase concentrations of MTBE, PCE and TCE, respectively, based on laboratory analytical results for the four new W&A wells and eight existing wells that were sampled by a W&A geologist. Laboratory results from other wells that had been sampled at an earlier date were also used as an aid in preparing the drawings, though that data is not shown on the drawings.

The limit of dissolved phase MTBE has been defined by prior consultants and the W&A definition of MTBE is not substantially different from prior interpretations. The limits of MTBE distribution appear to coincide with the south side of the 105 Freeway on the north, the west side of Long Beach Boulevard, Josephine Street on the south and the east property boundaries of the U-Haul property and the residential properties east of Garfield Express.

The highest concentration of dissolved phase PCE (480 µg/L) was found in well MW-4 located near the southwest corner of the Garfield Express Property. The lateral extent of dissolved phase PCE appears to be defined except in the north to northeast direction, and wells in those areas can be sampled in the future to further assess the north to northeast extent of PCE. The lateral limit of PCE in groundwater is roughly the same as that of MTBE though it appears to extend farther south and southeast than MTBE.

As with PCE, the highest concentration of dissolved phase TCE (170 µg/L) was found in well MW-4 located near the southwest corner of the Garfield Express Property. The lateral extent of dissolved phase TCE appears to be larger than that of PCE. The limit of dissolved phase TCE has been defined on the west side of the northern portion of the plume, but not south of Louise Street. The westernmost well on Louise Street had no detectable TCE and may represent the western extent of TCE contamination. To the east, MW-23 and MW-33 define the eastern limit of TCE contamination. The limit of dissolved phase TCE has not been fully defined to the north or the south due to the presence of TCE in northernmost well MW-13 and in southernmost wells W&A-MW-2 and W&A-MW-3.

11.0 CONCLUSIONS

Based on the most recent data collected during the completion of soil borings, well installation, CPT/ROSTTM, and groundwater monitoring and sampling at the proposed Lynwood Springs Retail Center, the following conclusions are made:

- 1. Groundwater Monitoring wells W&A-MW-1 through W&A-MW-4 were properly permitted and installed each to a depth of 45 feet bgs according to LARWQCB requirements.
- 2. High Vacuum wells W&A-HVW-1 through W&A-HVW-3 were properly permitted and installed each to a depth of 23 feet bgs according to LARWQCB requirements.
- 3. The site is underlain by interlayered silty sand and silt and lesser lean clay to the maximum drilling depth of 45 feet.
- 4. Depth-to-water ranged from 21.0 feet to 26.5 feet in the seven new wells.
- 5. Lead was detected in 8 out of 14 soil samples analyzed. Detected lead concentrations ranged from 1.4 mg/kg to 24 mg/kg (sample W&A-HVW1-2).
- 6. Benzene was detected in 19 out of 26 soil samples analyzed. Detected benzene concentrations ranged from 0.019 mg/kg to 150 mg/kg (soil sample W&A-HVW1-23).
- One or more soil samples collected from each of the soil borings and high vacuum well borings completed by W&A on or just to the east of the Garfield Express Property yielded detectable levels of MTBE. The highest MTBE concentrations were found in the vicinity of the pump islands. No MTBE was detected on the capillary fringe of the four W&A off-site well borings.
- 8. TCE and/or PCE were detected in one or more of the soil samples collected from the four W&A soil borings. The highest PCE concentration was 104 mg/kg at 26.5 feet bgs (in groundwater) in W&A-SB-2 on the east side of the Garfield Express building (TCE was not present in that sample). The highest TCE concentration was 5.8 mg/kg at 26 feet bgs (in groundwater) in W&A-SB-3 on the west edge of the Garfield Express Property (PCE was not

- present in that sample). None of the soil samples collected from either the high vacuum well borings or the off-site groundwater well borings contained detectable levels of PCE or TCE.
- 9. MTBE was detected in 3 out of the 12 groundwater samples that were collected by W&A. The highest MTBE concentration was 110,000 μg/L in well MW-4. No BTEX, MTBE or additional oxygenates were detected in any of the off-site W&A groundwater wells except for a benzene concentration of 4.1 μg/L in W&A-MW-2.
- 10. Three of the 12 groundwater samples (from MW-4, MW-23 and MW-33) contained detectable concentrations of PCE, with a maximum concentration of 480 μg/L in MW-4. TCE was detected in seven samples (including three from the W&A wells), with a maximum concentration 170 μg/L in well MW-4.
- 11. Elevated levels of MTBE were found in unsaturated, capillary and saturated zone samples near the pump islands. Two of the four vadose zone samples from borings in the east and west side of the site building contained low levels of MTBE. All four of the capillary fringe samples collected from the off-site well borings showed no detectable concentrations of MTBE.
- 12. Both PCE and TCE were detected throughout the soil column (both vadose and capillary zones) in boring SB-4 located near the southwest corner of the Garfield Express building. Boring SB-1 contained PCE in vadose zone soils but not in the capillary fringe or saturated zone and TCE was not found in any of those samples. PCE (and not TCE) was also detected in the saturated zone at SB-3 on the west edge of the Garfield Express Property. All soil samples collected from the high-vac well borings at the pump islands had no detectable PCE or TCE. All four of the capillary fringe samples collected from the off-site well borings showed no detectable concentrations of PCE or TCE.
- 13. The limits of dissolved phase MTBE appear to coincide with the south side of the 105 Freeway on the north, the west side of Long Beach Boulevard, Josephine Street on the south and the east property boundaries of the U-Haul Property and the residential properties east of the Garfield Express Property.

- 14. The lateral extent of dissolved phase PCE appears to be defined except in the north to northeast direction and is roughly the same as that of MTBE though it appears to extend further south and southeast than MTBE.
- 15. The limit of dissolved phase TCE has been defined on the west side of the northern portion of the plume, but not south of Louise Street. To the east, MW-23 and MW-33 define the eastern limit of TCE contamination. The limit of dissolved phase TCE has not been fully defined to the north or the south due to the presence of TCE in northernmost well MW-13 and in southernmost wells W&A-MW-2 and W&A-MW-3.
- 16. CPT/ ROST™ was conducted on the site to obtain information regarding the petroleum hydrocarbon product thickness and distribution in the subsurface. The separate phase product impact on the soil was noted to exist predominately in a one-foot thick soil layer just above the water table. The thickness of separate phase product in the soil was observed to be much less than the separate phase product measured in nearby wells. Approximately 44,500 gallons of separate phase product was estimated to be present at the site.

12.0 LIMITATIONS

Drilling, soil sampling and well installation were performed by or under the supervision of a W&A California Registered Geologist or an N&M Professional Engineer. All data presented in this report was reviewed by a W&A California Registered Geologist and N&M Professional Engineer for correctness. The conclusions contained in this report were based in part on direct observation by W&A and N&M scientists and in part on data provided by other consultants to the Garfield Express Property owner. Conclusions were based on currently available information and were arrived at in accordance with currently accepted hydrogeologic practices at a discrete time and location. No other warranty was implied or intended.

TABLES

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TABLE 1
CPT/ROST PRODUCT THICKNESS RESULTS
PROPOSED LYNWOOD SPRINGS RETAIL CENTER, LYNWOOD, CALIFORNIA

		Free Produ	ct Thickness (feet)		
ROST Location	Date	ROST	In Well Monitoring	Monitoring Well	Product to Moisture Ratio
R-1	01/10/03	0	3.43 *	MW-11	0.00
R-2	01/10/03	5	3.43 *	MW-11	1.46
R-3	06/26/02	1	8.54	MW-9	0.12
R-4	01/10/03	1	7.43 *	MW-14	0.13
R-5	01/10/03	0	6.44 *	MW-22	0.00
R-6	06/26/02	1	8.54	MW-9	0.12
R-7	06/26/02	4	0.09	MW-2	44.44
R-8	06/26/02	0	0.00	MW-4	0.00
R-9	06/26/02	0	0.00	MW-4	0.00
R-10	01/10/03	0	5.12 *	MW-12	0.00
R-11	01/10/03	8	10.81 *	MW-15	0.74
R-12	06/26/02	0	0.00	MW-23	0.00
R-13	06/26/02	0	0.00	MW-23	0.00
R-14	06/26/02	0	0.00	MW-21	0.00
R-15	06/26/02	1	9.61	MW-16	0.10
R-16	06/26/02	0	0.00	MW-24	0.00
R-17	06/26/02	1	0.00	MW-24	0.00

Notes:

ROST data dated February 24 and 25, 2003.

Separate Phase Product measured on 6/26/02.

^{*}Separate Phase Product measured on 1/10/03.

Table 2
CPT/ROST Physical Properties Data
Proposed Lynwood Springs Retail Center, Lynwood, California

	Depth	De	ensity	Poi	rosity	Pore Fluid	Saturation, %	Ratio of Free
Sample ID	(ft.)	Bulk	Grain	Total	Air Filled	Water	NAPL	Product to Water
SR-2	23	1.46	2.73	46.4	12.0	74.8	ND	0.00
SR-3	25	1.61	2.70	40.3	8.9	58.5	19.4	0.33
SR-4	19	1.54	2.75	44.0	8.1	80.8	ND	0.00
SR-6	27	1.44	2.73	47.1	1.6	94.4	2.3	0.02
SR-7	28	1.60	2.72	41.3	9.9	69.1	6.8	0.10
SR-8	26	1.56	2.68	41.8	10.9	60.7	13.2	0.22
SR-11	23	1.48	2.70	45.1	10.9	71.6	4.2	0.06
SR-15	27	1.41	2.70	48.0	17.7	57.1	6.0	0.11
SR-17	36	1.42	2.67	46.7	23.2	41.5	8.9	0.21
			Average	44.9			Average	0.10

TABLE 3
LIST OF COMPOUNDS ANALYZED BY EPA 8260B AND 8270

82	260B	8	270
Benzene	Hexachlorobutadiene	Acenaphthene	4,6-Dinitro-2 methylphenol
Bromodichloromethane	Isopropylbenzene	Acenaphthylene	2,4-Dinitrotoluene
Bromoform	4-Isopropyltoluene	Anthracene	2,6-Dinitrotoluene
Bromomethane	Methylene chloride	Benzidine	Di-n-octyl phthalate
n-Butylbenzene	Naphthalene	Benzo (a) anthracene	1,2-Diphenylhydrazine
sec-Butylbenzene	n-Propylbenzene	Benzo (b) fluoranthene	Fluoranthene
tert-Butylbenzene	Isopropyltoluene	Benzo (k) fluoranthene	Fluorene
Carbon tetrachloride	Methyl tert-Butyl Ether	Benzo (a) pyrene	Hexachlorobenzene
Chlorobenzene	4-Methyl-2-pentanone	Benzo (g,h,i) perylene	Hexachlorobutadiene
Chloroethane	Styrene	Benzyl Alcohol	Hexachlorocyclopentadiene
Chloroform	1,1,1,2-Tetrachloroethane	Bis(2-chloroethyl)ether	Hexachloroethane
Chloromethane	1,1,2,2,-Tetrachloroethane	Bis(2-chloroethoxy)methane	Indeno (1,2,3-cd) pyrene
2-Chlorotoluene	Tetrachloroethylene	Bis(2-ethylhexyl)phthalate	Isophorone
4-Chlorotoluene	Toluene	Bis(2-chloroisopropyl)ether	2-Methylnaphthalene
Dibromochloromethane	1,2,3-Trichlorobenzene	4-Bromophenyl phenyl ether	2-Methylphenol
1,2-Dibromo-3-chloropropane	1,2,4-Trichlorobenzene	Butyl benzyl phthalate	4-Methylphenol
1,2-Dibromoethane (EDB)	1,1,1-Trichloroethane	4-Chloroaniline	Naphthalene
Dibromomethane	1,1,2-Trichloroethane	2-Chlorophenol	2-Nitroaniline
1,2-Dichlorobenzene	Trichloroethylene	4-Chloro-3-methylphenol	3-Nitroaniline
1,3-Dichlorobenzene	Trichlorofluoromethane	2-Chloronaphthalene	4-Nitroaniline
1,4-Dichlorobenzene	1,2,3-Trichloropropane	4-Chlorophenyl phenyl ether	Nitrobenzene
Dichlorodifluoromethane	1,2,4-Trimethylbenzene	Chrysene	2-Nitrophenol
1,1-Dichloroethane	1,3,5-Trimethylbenzene	Dibenz (a,h) anthracene	4-Nitrophenol
1,2-Dichloroethane	Vinyl chloride	Dibenzofuran	N-Nitrosodimethylamine
1,1-Dichloroethene	Xylenes	1,3-Dichlorobenzene	N-Nitrosodiphenylamine
cis-1,2-Dichloroethene	Methyl tert-butylether (MTBE)	1,2-Dichlorobenzene	N-Nitrosodi-n-propylamine
trans-1,2-Dichloroethene	Ethyl-tert-butylether	1,4-Dichlorobenzene	Pentachlorophenol
1,2-Dichloropropane	Di-isopropylether	3,3-Dichlorobenzidine	Phenanthrene
1,3-Dichloropropane	tert-amylmethylether	2,4-Dichlorophenol	Phenol
2,2-Dichloropropane	tert-Butylalcohol	Diethyl phthalate	Pyrene
1,1-Dichloropropene		2,4-Dimethylphenol	1,2,4-Trichlorobenzene
cis-1,3-Dichloropropene		Dimethyl phthalate	2,4,5-Trichlorophenol
trans-1,3-Dichloropropene		Di-n-butyl phthalate	2,4,6-Trichlorophenol
Ethylbenzene		2,4-Dinitrophenol	

Table 4

Summary of Soil Analytical Results for BTEX, MTBE, Additional Oxygenates and Lead Proposed Lynwood Springs Retail Center, Lynwood, California

Sample ID with Depth	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	ETBE (mg/kg)	DIPE (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	Lead (mg/kg)	
Soil Borings C	Soil Borings Completed by Winefield & Associates											
W&ASB1-1	03/04/03					••					13	
W&ASB1-5.5	03/04/03	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U		
W&ASB1-10.5	03/04/03	0.1 U	0.1 U_	_ 0.1 U	0.1 U	0.11	0.1 U	0.1 U	0.1 U	0.1 U		
W&ASB1-20.5	03/04/03	12	54	6	25	620	0.82 U	0.82 U	0.82 U	0.82 U		
W&ASB1-25.5	03/04/03	20	94	22	55	540	1 U	1 U	1 U	l·U		
W&ASB1-25.5D*	03/04/03	15	72	16	44	540	0.72 U	0.72 U	0.72 U	0.72 U		
W&ASB2-2.5	03/03/03		-					-			4.1	
W&ASB2-6.5	03/03/03	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U		
W&ASB2-11.5	03/03/03	0.12	0.002	0.002 U	0.093	4.6	0.002 U	0.002 U	0.002 U	0.002 U		
W&ASB2-26	03/03/03		·	-	•	1	•			•	2.8 U	
W&ASB2-26.5	03/03/03	74	443	11.3	404	307	2 U	2 U	2 U	2 U		
W&ASB2-26.5D*	03/03/03	41	245	60	227	240	2 U	2 U	2 U	2 U		
W&ASB3-1	03/0303				-	•	1			!	11	
W&ASB3-6	03/03/03	0.18	0.37	0.039	0.46	37	0.002 U	0.002 U	0.002 U	0.002 U	•	
W&ASB3-11	03/03/03	0.13	0.23	0.002 U	0.19	32.3	0.002 U	0.002 U	0.002 U	0.002 U		
W&ASB3-26	03/03/03	53.9	20.8	57.7	187	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	2.8 U	
W&ASB4-11	03/03/03	0.019	0.002 U	0.002	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U		
W&ASB4-21	03/03/03	0.1	0.17	0.058	0.12	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	3.4	
W&ASB4-26	03/03/03	2.3	3	0.12	0.81	0.24	0.002 U	0.002 U	0.002 U	0.002 U	2.8 U	

Table 4 Summary of Soil Analytical Results for BTEX, MTBE, Additional Oxygenates and Lead Proposed Lynwood Springs Retail Center, Lynwood, California

Sample ID with Depth	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	ETBE (mg/kg)	DIPE (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	Lead (mg/kg)
Groundwater I	Monitorin	g Wells In	stalled by	Winefield	& Associa	ites					
W&AMW1-26	02/10/03	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	1.3 U
W&AMW2-20.5	03/03/03	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	3.5
W&AMW3-1	02/10/03			. <u></u>							1.4 U
W&AMW3-25	02/11/03	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	1.4
W&AMW4-25	02/10/03	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	1.4
High Vacuum V	Vells Inst	alled by W	inefield &	Associate	S						
W&AHVW1-2	3/4/2003					. 					24
W&AHVW1-6	03/04/03	16	180	46	250	720	0.74 U	0.74 U	0.74 U	0.74 U	
W&AHVW1-11	03/04/03	16	90	43	150	1,800	8.6 U	8.6 U	8.6 U	8.6 U	
W&AHVW1-23	03/04/03	150	1,000	200	680	3,400	7.8 U	7.8 U	7.8 U	7.8 U	
W&AHVW2-22	03/03/03	27	357	13	330	445	0.4 U	0.4 U	0.4 U	0.4 U	
W&AHVW3-2.5	03/04/03										2.8 U
W&AHVW3-6	03/04/03	73	240	33	150	410	7.2 U	7.2 U	7.2 U	7.2 U	
W&AHVW3-11	03/04/03	3.9	11	4 U	7.1	850	4 U	4 U	4 U	4 U	
W&AHVW3-22.5	03/04/03	110	430	90	270	2,300	4 U	4 U	4 U	4 U	

Notes:

BTEX = benzene toluene, ethybenzene, and xylenes (EPA method 8260)

DIPE = di-isopropyl ether (EPA method 8260)

EPA = US Environmental Protection Agency

ETBE = ethyl tert-butyl ether (EPA method 8260)

mg/kg = milligrams per kılogram

MTBE = methyl tertiary-butyl ether (EPA method 8260)

TBA = tert-butanol (EPA method 8260)

U = not detected at or above the stated reporting limit

-- = not sampled

^{* =} duplicate soil sample



Soil Sampling Results - Selected Aromatic and Chlorinated Hydrocarbons Proposed Lynwood Springs Retail Center, Lynwood, California

·				_										
Somple ID with Depth	Semple Date	n-Butylbenzene (mg/kg)	sec- Butylbenzene (mg/kg)	Chloroform (mg/kg)	Isopropytbenzene (mg/kg)	4-isopropyttutuene (mg/kg)	Nephthalene ³ (mg/kg)	n-Propylbenzene (mg/kg)	1,1,1,2- Tetrachloroethape (mg/kg)	Tetrachioroethylens (mg/kg)	Trickoroethytene (mg/kg)	1,2,4- Trimethylbenzene (mg/kg)	1,3,5- Trimethytheuzene (mg/kg)	N-Nitrosodi-u- propylamine (mg/kg)
Soil Borings C	ompleted	by Winefield	& Associates											
w	03/04/03	0 002 U	0 002 U	0 002 U	0 002 U	0 002 U	0 002 Li i	0 002 U	0 002 U	0 044	0 002 U	0 002 U	0 002 U	
W&ASB1-6	03/04/03	_	-	_		-	(U)	-		-	-		~	0 2 UJ ²
W&ASB1-10.3	03/04/03	010	010	010	DIU	010	0101	0 1 U	olu	0 013	011/	010	010	-
W&ASB1-11	03/04/03	-	1	-		~	1ប³		-	-	-	-	-	02 UJ ⁷
W&ASB1-20 5	03/04/03	0 82 U	0 82 U	082 U	0.24	0.076	982U'	20	0.82 U	0 82 U	0 82 U	52.5	20.9	-
W&ASB1-25 5	03/04/03	1 U	1 U) U	ıU	ıU	61 ²	26	10	1 U	10	71.8	33.6	02132
W&ASB1-25 5D*	Ω3/04/03	0 72 U	0 72 U	0 72 U	0 72 U	0 72 U	0.89 1	18	072 U	0 72 U	0 72 U	79.9	38.7	tud.
W&A5B2-6 5	03/03/03	0 002 U	0 002 U	0 002 U	0 002 U	0 002 U	0 002 U 1	0 002 U	0 002 U	9,0066	0 002 U	0 002 U	0 002 U	-
W&ASB2-115	03/03/03	0 002 U	0 002 U	0 002 U	0 002 U	0 002 U	0 002 U ¹	0.013	0 002 U	0 036	0 0075	0.025	0.025	-
W&ASB2-26.5	03/03/03	2 U	2 U	2 U	173	2 U	16 1	35	2 U	104	2 U	240	240	-
W&ASB2-26 5D*	03/03/03	2 U	2 U	2 U	2 U	2 ป	7.1 1	22	21/	53.9	2 U	136	136	-
W&ASB3-6	03/03/03	0 002 U	0 002 U	0 002 U	0 002 U	0 002 U	0.036	0.03	0 002 U	0 002 IJ	0 002 U	0.27	0.27	0 2 UJ ²
W&ASB3-11	03/03/03	0 002 U	0 002 U	0 002 U	0 002 U	5 002 U	0 002 U 1	0.033	0 002 U	0 002 U	0 002 1,1	0 18	0 18	0 2 UJ ³
W&ASB3-26	03/03/03	080	08U	08U	2.3	1.4	5.1	14.3	08U	5.8	080	103	103	
W&ASB4-11	03/03/03	0 002 U	_0 002 U	0 002 U	0 002 U	0 002 U	0 002 U '	0 002 U	0.002.0	0.49	0.046	0 002 U	0 002 U	-
W&ASB4-21	03/03/03	0 002 U	0 002 U	0 902 U	0 002 U	0 002 U	0 002 U 1	0.02	0 002 U	9.2	0.035	0 043	0 043	-
W&ASB4-26	03/03/03	0 002 U	0 002 U	0 002 U	0 002 U	0 002 U	0 017 1	0.029	0 002 U	0.051	0.013	0 (8	0.18	
Groundwater!	Monitorin	g Wells Instal	led by Winefl	eld & Associ	ates									
W&AMW1-26	02/10/03	0 002 U	0 002 U	0 902 U	0 002 U	0 002 U	0 002 U '	0 002 U	0 002 U	0 002 U	0 002 U	0 002 U	0 002 U	-
W&AMW2-20 5	03/03/03	0 002 U	0 002 ป	0 002 U	0 002 U	9 002 U	0 002 U ¹	0 002 ()	0 002 U	0 002 tJ	0 002 U	0 002 U	0 002 U	_
W&AMW3-25	02/11/03	0 002 U	0 002 ป	8 002 U	0 002 U	0 002 บ	0 002 U 3	0 002 U	0 002 U	0 002 U	0 002 U	0 002 U	0 002 U	
W&AMW4-25	02/10/03	0 002 U	0 002 U	9 002 U	0 002 U	0 002 U	0 002 U 1	8 002 U	0 002 U	0 002 U	0 002 U	0 002 U	0 002 U	
High Vacuum \	Vells Inst	alled by Wines	îeld & Associ	ates										
W&AHVW1-6	03/04/03	0 74 ม	18.0	0.13	3.5	2.3	10 ¹	13	0 74 U	0 74 U	0 74 U	218	413	0 2 UJ ²
W&AHVW1-11	03/04/03	8.6 U	86U	86 U	1.6	86U	16 '	12	86U	860	86U	244	220	311112
W&AHVW1-23	03/04/03	78 U	61	9.1	2.3	13	78U¹	200	78 U	78 U	7 B U	828	391	02UJ ²
W&AHVW2-22	03/03/03	0 4 U	0.32	04 U	2.5	1.5	6.7 1	11.5	04 U	04U	04 U	189	189	~
W&AHVW3-6	03/04/03	3.5	5.1	720	13	11	24 '	170	7,9	720	7 2 U	598	244	0 2 LU ²
W&AHVW3-11	03/04/03	4U	4 U	4 U	4 Ü	4 U	5.6 °	1.6	40	4 U	4 U	63	30.4	02W ³
W&AHVW3-22 5	03/04/03	4 U	3.6	5	12	8.6	75 1	46	4 U	40	4 U	75.5	117	-

Notes

1 = result determined by EPA 8260B

2 = result determined by EPA 8270C

3 = In some cases, naphthalene was analyzed by both EPA 8260B and EPA 8270C. If the data quality for both analyses met the QC acceptance enters, the detected result was reported. If the data quality for both samples were none detected, the result with the lowest reporting limit was reported.

BTEX = benzene toluene, othybenzene, and sylenes (EPA method 8260)

DIPE = da-supropyl ether (EPA method 8260)

EPA = US Environmental Protection Agency

ETBE = ethyl tert-butyl ether (EPA method 8260)

J = estimated value

mg/kg = milligrams per kilogram

MTBE = methyl tertiary-buryl ether (EPA method 8260)

TBA = tert-butamol (EPA method \$250)

U = not detected at or above the stated reporting limit

UJ = not detected at or above the stated, estimated reporting limit

~ = not sampled

* = duplicate soil sample

Equipment Rinsate and Temperature Blank Results Proposed Lynwood Springs Retail Center, Lynwood, California

					EPA	8260B					EPA 200	1	
Sample ID with Depth	Sample Date	Benzene (μg/L)	Toluene (μg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	MTBE (μg/L)	ETBE (µg/L)	DIPE (µg/L)	TAME (µg/L)	TBA (μg/L)	Lead (μg/L)	Temperature (°C)	
Temperature	Blank		_		•								
#1	02/10/03		••									5.8	
#2	02/11/03		•	••	**							5.6	
#3	03/03/03		•									2.7	
#4	03/04/03	-	•	••								NM	
#5	03/18/03		-									6.1	
#6	03/18/03		ł	•								4.8	
#7	03/18/03		•	••								4.8	
#8	03/21/03		••									3.1	
Equipment Rin	sate Samp	oles	_	_									
W&A-ER-1	02/10/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
W&A-ER-2	02/11/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 0 U		
W&A-ER-3	03/03/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 0 U		
W&A-ER-4	03/04/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U		

Notes:

BTEX = benzene toluene, ethybenzene, and xylenes

DIPE = di-isopropyl ether

ETBE = ethyl tert-butyl ether

MTBE = methyl tertiary-butyl ether

NM = laboratory did not record temperature

TBA = tert-butanol

U = not detected at the stated reporting limit

 μ g/L = micrograms per liter

°C = degrees celsius

-- = not sampled or measured

TABLE 7 GROUNDWATER MONITORING AND ANALYTICAL RESULTS - MARCH, 2003 FOR TPH8, BTEX, MTBE, AND ADDITIONAL OXYGENATES PROPOSED LYNWOOD SPRINGS PROPERTY 11600 LONG BEACH BLVD, LYNWOOD

Well	Sample	Wellhead	Depth to	Total	GW			-		EPA 82	.60B					•		EPA 200
Number ¹	Date	Elevation ²	Water ³	Depth	Elevation ⁴	TPHg (C4-C12)	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	DIPE	ЕТВЕ	TAME	TBA	EDB	EDC	Lead
i			(feet)	(feet)	(feet)	(μg/L)	(µg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(µg/L)	(μg/L)	(μg/L)	(μg/L)	(µg/L)	(μg/L)	(mg/L)
) (NY 4	02/17/02	81.00	22.00	42.44	(5.02	20.000	45,000	460	^5	F.	****	0511	7.	0.511	0.511	0.511	0.6.11	0.02.11
MW-4 MW-6	03/17/03 03/17/03	81.88 81.27	23.96 22.85	43.44 41.02	57.92 58.42	32,000 50 U	15,000 0 5 U	450 0.5 U	95 0.5 U	51 0.5 U	110,000 0 5 U	0.5 U 0 5 U	71 0.5 U	0.5 U 0.5 U	0.5 U 0.5 U	0.5 U 0.5 U	0.5 U 0.5 U	0.02 U 0 02 U
MW-13	03/17/03	85.37	23.77	44.30	61.60	50 U	0 S U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.02 U
MW-17	03/17/03	83.53	22.95	43.77	60.58	50 U	0.5 U	0.5 U	0.5 U	0.5 U	0 S U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 02 U
MW-19	03/17/03	84.50	23.2	41.28	61.30	4,000	1,300	600	370	210	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.02 U
MW-23	03/17/03	83.34	22.40	44.50	60.94	2,300	280	22	61	0 5 U	3,700	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.02 U
MW-24	03/17/03	83 14	23.10	41.59	60.04	51	0 S U	12	1.2	25	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.022
MW-33	03/17/03	83.20	22.05	43.60	61.15	3,000	1,200	85	14	0.5 U	110	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.02 U
W&A-MW-1	03/21/03		23.70	44.85			0.5 U	0 S U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 ป	0.5 U	
W&A-MW-2	03/21/03	_	23.58	44.88	-	-	4.1	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-
W&A-MW-3	03/21/03		23.12	44.90		-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	- 1
W&A-MW-4	03/21/03		22.70	44.89			0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0 5 U	0 5 U	0.5 U	0.5 U	0.5 U	

1 = All groundwater monitoring and sampling conducted by Winefield & Associates.

2 = Wellhead elevations resurveyed on 1/11/00.

3 = Depth to water measured in feet from top of casing.

4 = Groundwater elevation in feet above mean sea level.

C4 = butane

C12 = dodecane

DIPE = di-isopropyl ether EDB = ethylene dibromide or 1,2 dibromoethane

EDC = 1,2 dichloroethane (1,2 DCA)

ETBE = ethyl tert-butyl ether

mg/L = milligrams per liter MTBE = methyl-tertiary-butyl ether

TAME = tert-amyl methyl ether

TBA = tert-butanol

TPHg = total petroleum hydrocarbons characterized as gasoline

U = not detected at or above the stated reporting limit

μg/L = micrograms per liter

-- = not sampled/measured or not applicable

TABLE 8
GROUNDWATER MONITORING RESULTS - SELECTED AROMATICS AND CHLORINATED HYDROCARBONS, MARCH, 2003
PROPOSED LYNWOOD SPRINGS PROPERTY
11600 LONG BEACH BLVD, LYNWOOD

				EPA 8260	В		
Well Number ¹	n-Butylbenzene (μg/L)	sec-Butylbenzene (μg/L)	tert-Butylbenzene (µg/L)	4-Chlorotoluene (μg/L)	cis-1,2-Dichloroethene (μg/L)	trans-1,3-Dichloropropene (µg/L)	Isopropylbenzene (µg/L)
MW-4	29	16	0.5 U	16	0.5 U	0.5 U	24
MW-6	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U
MW-13	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-17	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	16	0.5 U
MW-19	44	18	17	24	0.5 U	0.5 U	35
MW-23	19	16	0.5 U	0.5 U	0.5 U	0.5 U	14
MW-24	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-33	22	16	0.5 U	14	0.5 U	0.5 U	18
W&A-MW-1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
W&A-MW-2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U
W&A-MW-3	0.5 U	0.5 U	0.5 U	0.5 U	17	0.5 U	0.5 U
W&A-MW-4	0 5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U

	EPA 8260B						
Well .	4-Isopropyltoluene	Naphthalene	n-Propylbenzene	Tetrachloroethylene	Trichloroetheylene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
Number	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(µg/L)
MW-4	0.5 U	41	38	480	170	16	40
MW-6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	13
MW-13	0.5 U	0.5 U	0.5 U	0.5 U	28	0.5 U	15
MW-17	0.5 U	0.5 U	0.5 U	0.5 U	24	0 5 U	0.5 U
MW-19	17	50	120	0.5 U	0.5 U	18	90
MW-23	0.5 U	0.5 U	26	24	0.5 U	0.5 U	27
MW-24	0.5 U	0.5 U	0.5 U	52	24	0.5 U	0.5 U
MW-33	0.5 U	0.5 U	30	0.5 U	0.5 U	. 16	26
W&A-MW-I	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
W&A-MW-2	0 5 U	0.5 U	0.5 U	0.5 U	26	0.5 U	0.5 U
W&A-MW-3	0 5 U	0.5 U	0.5 U	0.5 U	49	0.5 U	0.5 U
W&A-MW-4	0.5 U	0.5 U	0.5 U	0.5 U	0.8	0 S U	0.5 U

Notes:

1 = All groundwater monitoring and sampling conducted by Winefield & Associates.

DIPE = di-isopropyl ether

EDB = ethylene dibromide or 1,2 dibromoethane

EDC = 1,2 dichloroethane (1,2 DCA)

EPA = US Environmental Protection Agency

ETBE = ethyl tert-butyl ether

MTBE = methyl-tertiary-butyl ether

TAME = tert-amyl methyl ether

TBA = tert-butanol

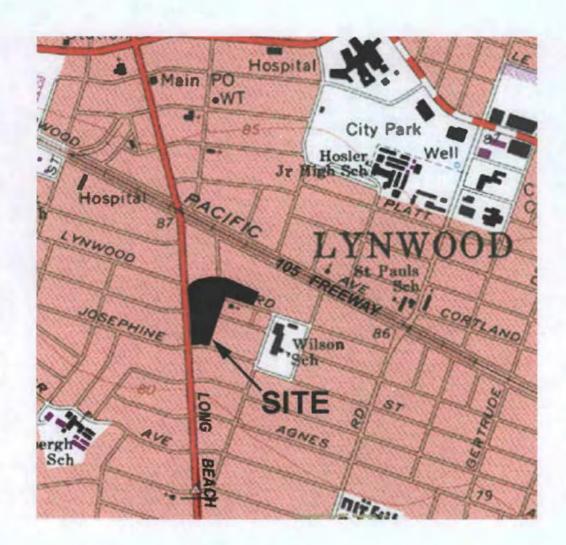
TPHg = total petroleum hydrocarbons characterized as gasoline

U = not detected at or above the stated reporting limit

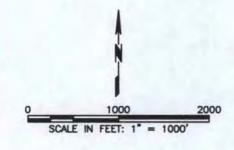
μg/L = micrograms per liter

- = not sampled/measured or not applicable

FIGURES



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, SOUTH GATE QUADRANGLE LOS ANGELES COUNTY, CALIFORNIA





WINEFIELD & ASSOCIATES ENVIRONMENTAL AND SAFETY CONSULTANTS

DESCRIPTION

SITE LOCATION MAP

LYNWOOD SPRINGS DEVELOPMENT LYNWOOD, CALIFORNIA

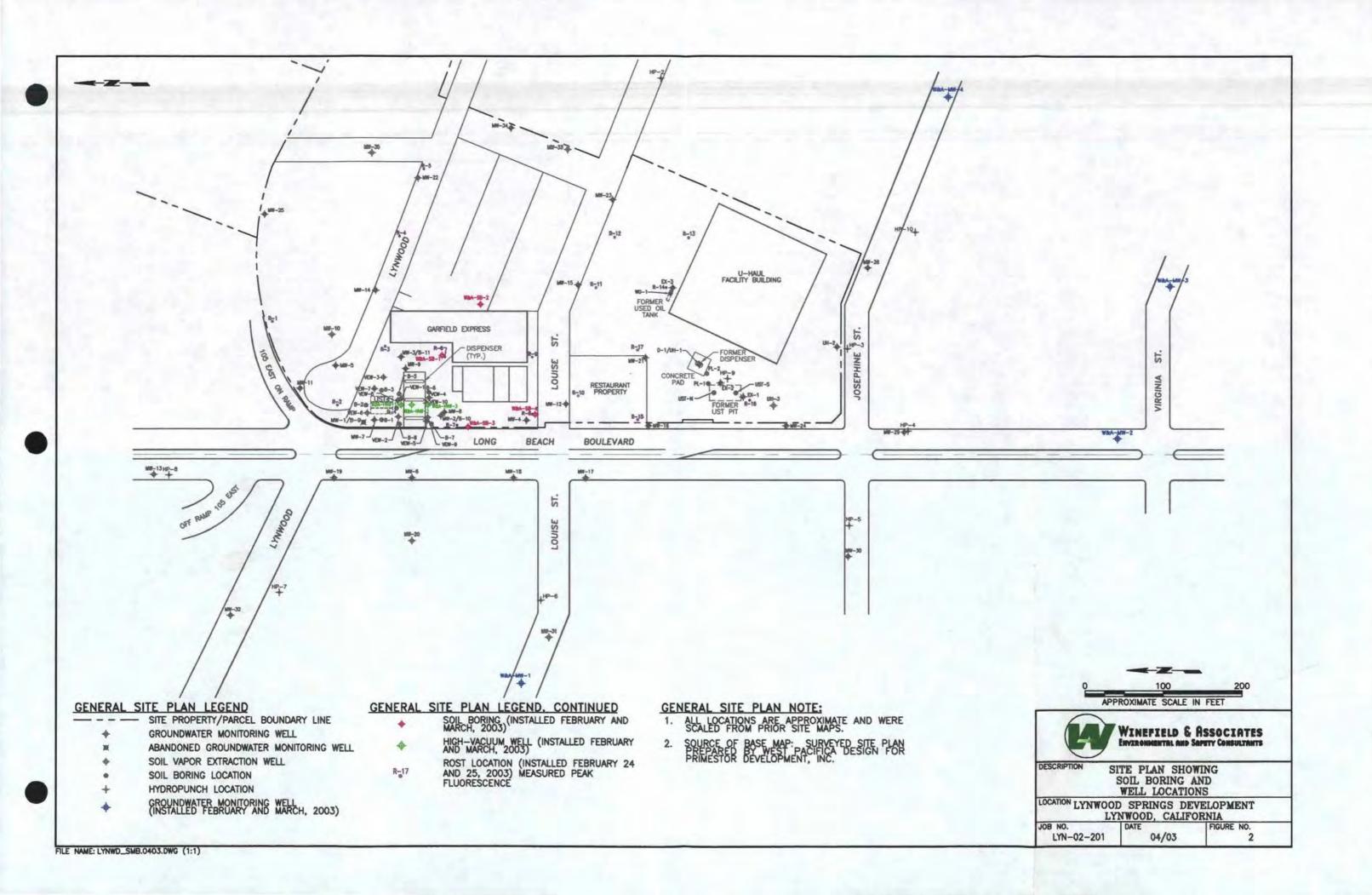
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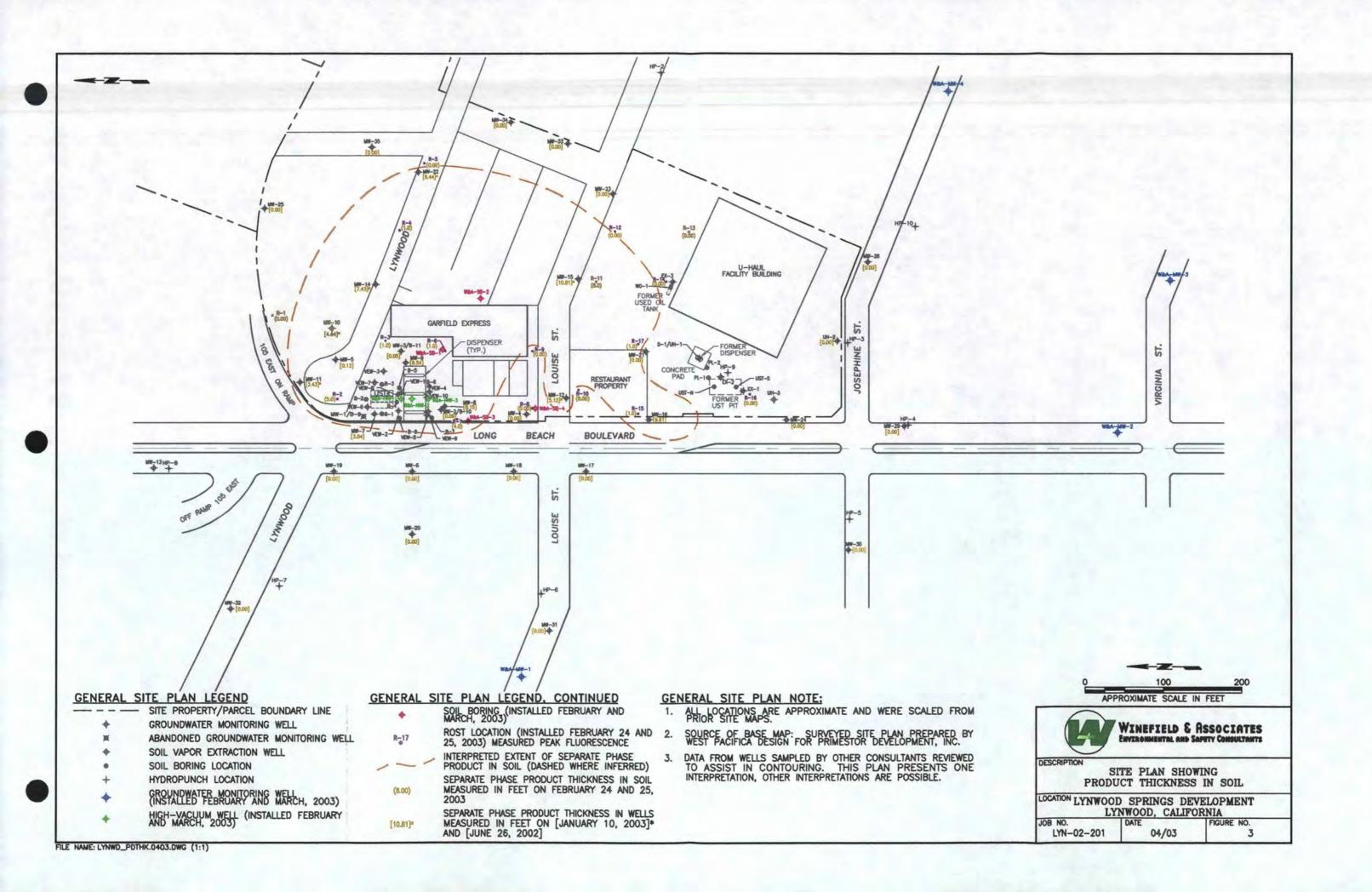
04/03

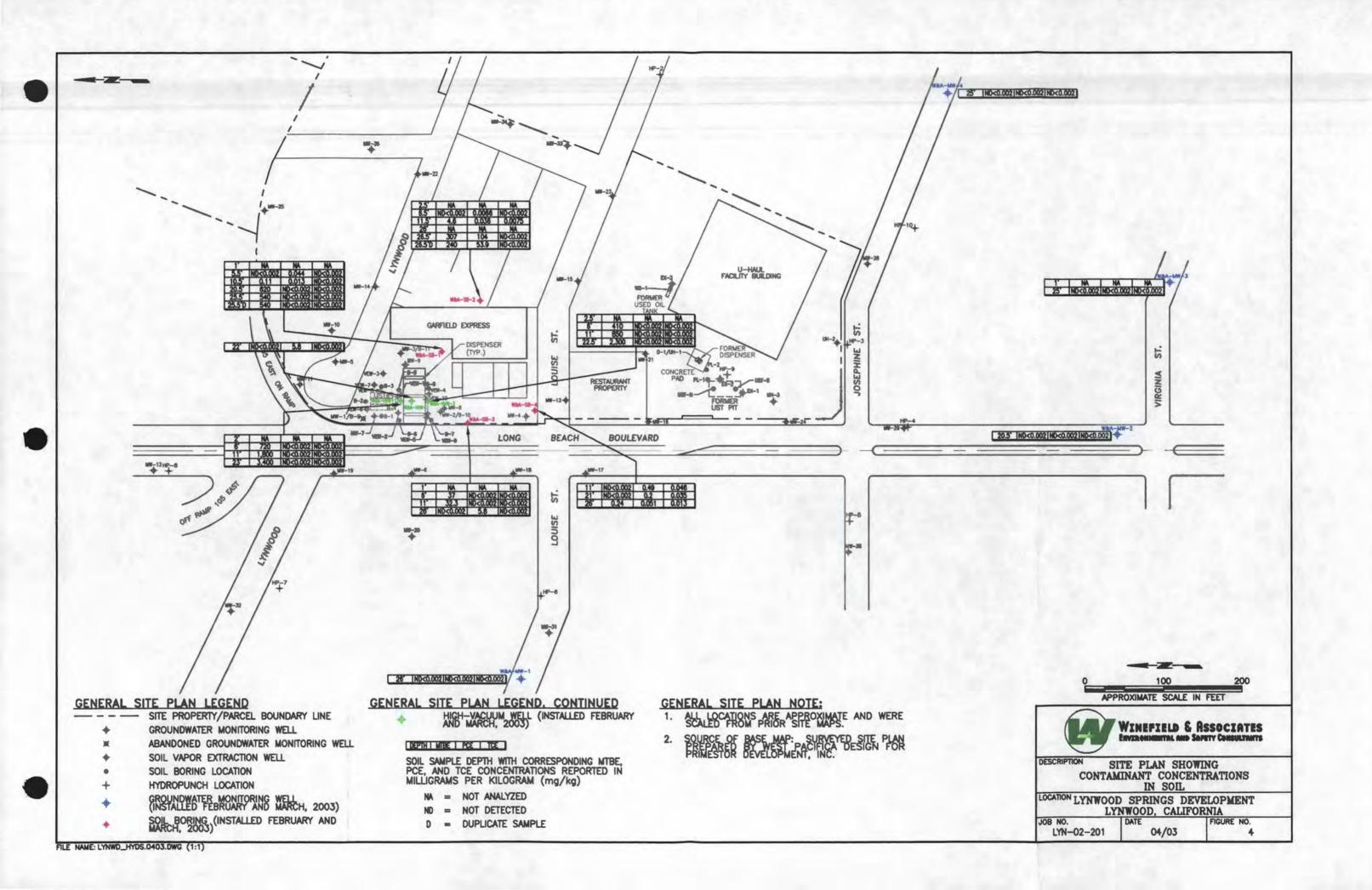
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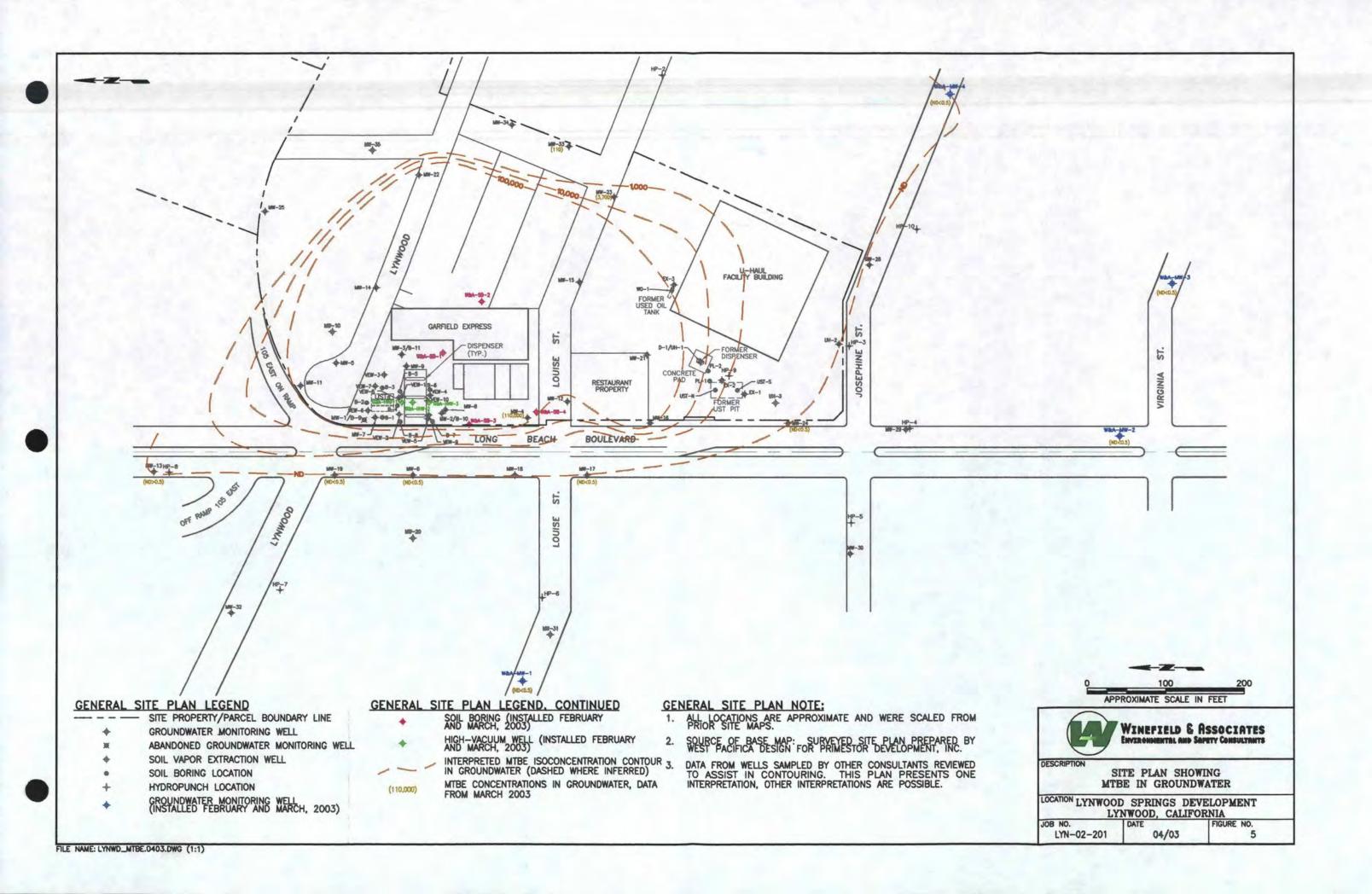
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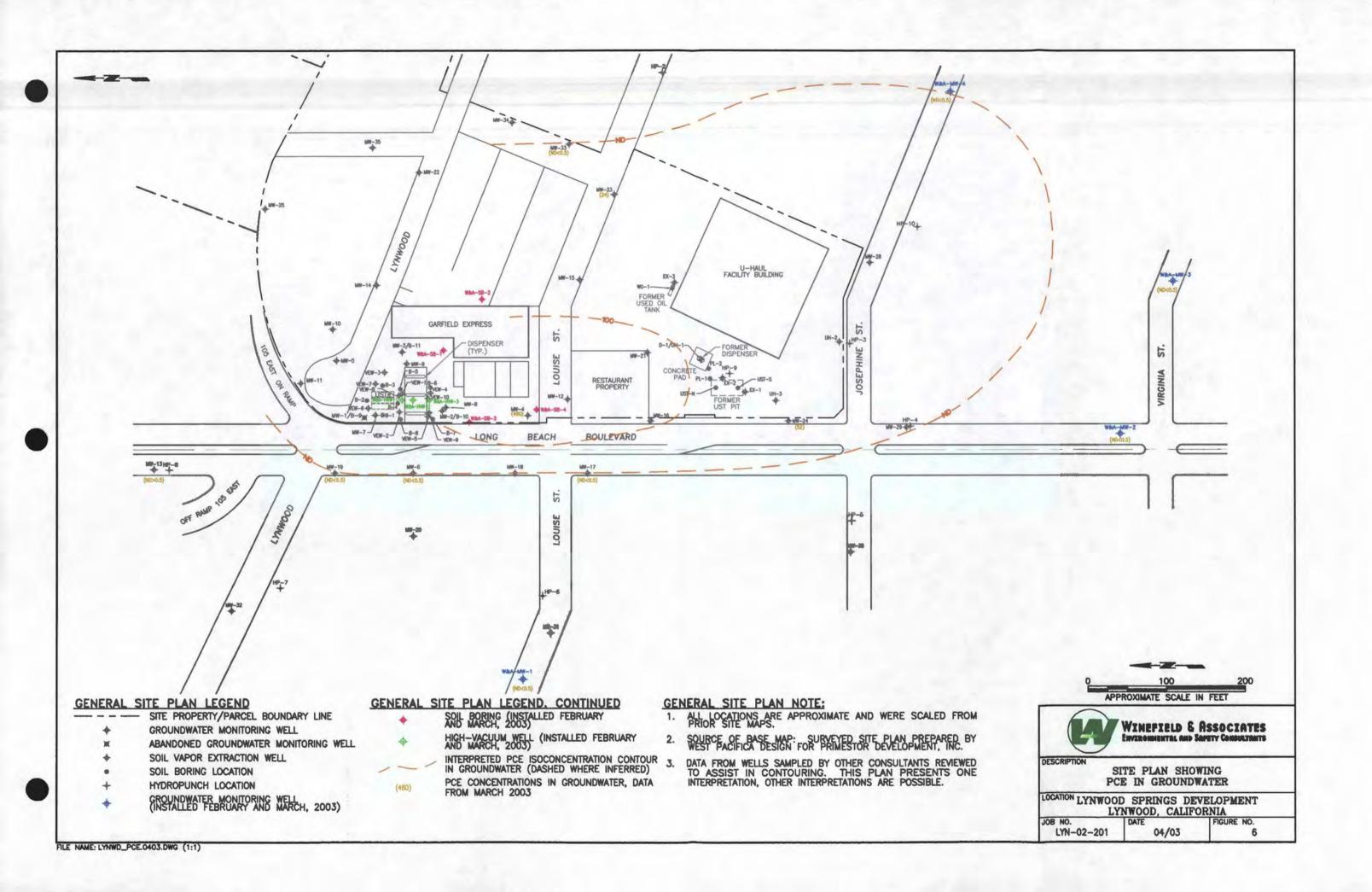
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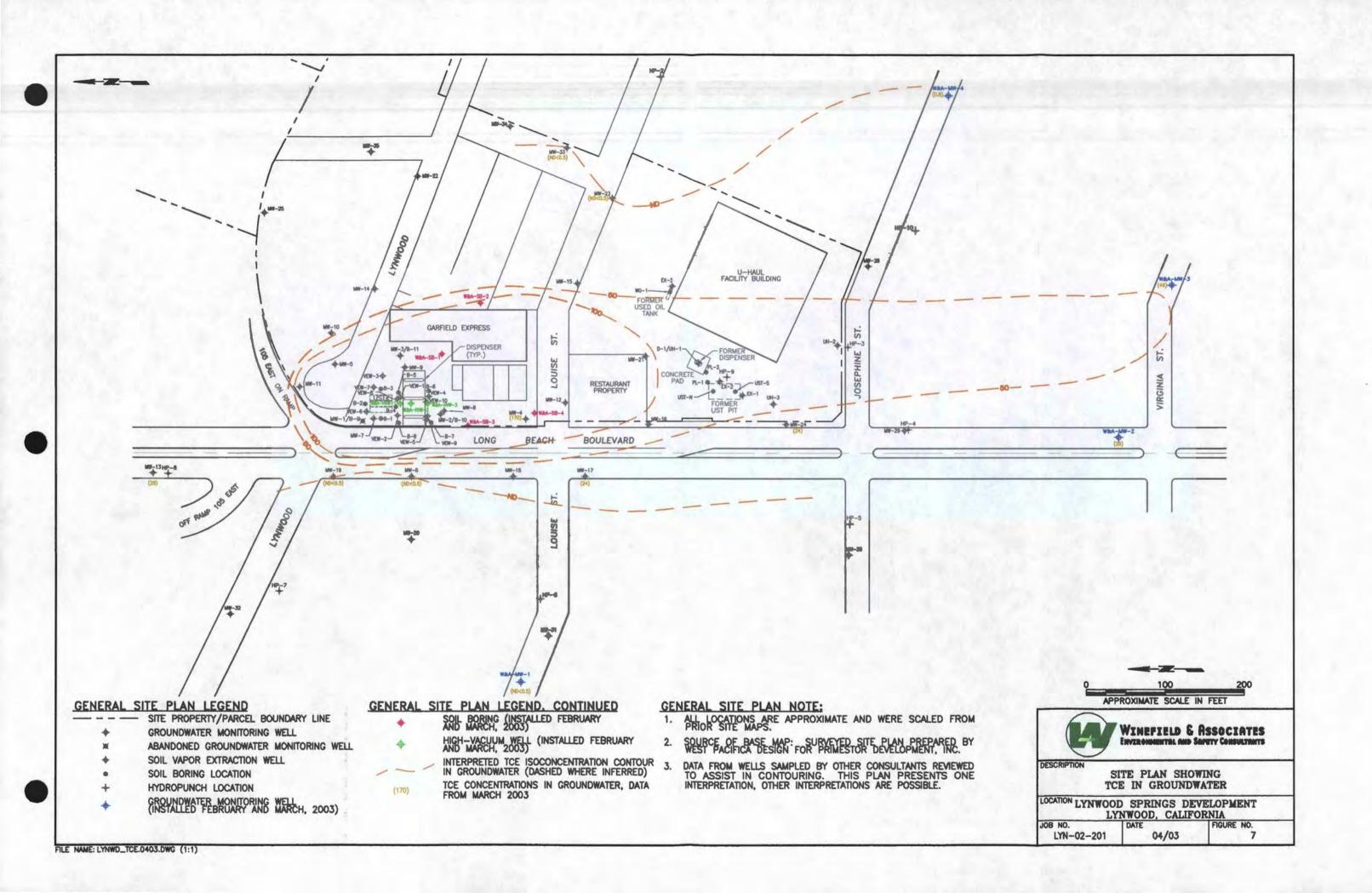












APPENDICES

APPENDIX A AGENCY CORRESPONDENCE

California Regional Water Quality Control Board



Winston H. Hickox Secretary for Environmental Protection Over 50 Years Serving Coastal Los Angeles and Ventura Counties
Recipient of the 2001 Environmental Leadership Award from Keep California Beautiful



320 W. 4th Street, Suite 200, Los Angeles, California 90013 Phone (213) 576-6600 - FAX (213) 576-6640 - Internet Address: http://www.swrcb.ca.gov/rwqcb4

February 4, 2003

Ms. Shirley Wolf Project Manager City of Lynwood 11330 Bullis Road Lynwood, CA 90262

UNDERGROUND TANK PROGRAM – EVALUATION OF WORK PLAN SUBMITTED FOR SITE ASSESSMENT, FEASIBILITY STUDY, AND PREPARATION OF REMEDIAL ACTION PLAN
PROPOSED LYNWOOD SPRINGS RETAIL CENTER
LYNWOOD, CALIFORNIA

Dear Ms. Wolf:

Thank you for "work plan for site assessment, feasibility study, and preparation of remedial action plan" (workplan) dated December 9, 2002 prepared by Winefield & Associates, Inc. (W&A) for the proposed Lynwood Springs Retail Center in Lynwood, California. This site is located on the east side of Long Beach Boulevard and extends south from the south side of the 105 Freeway to Josephine Street. The site is composed of a number of individual properties that include residences, a strip mall that includes a former dry cleaner and a retail gasoline station, a former restaurant and a U-Haul vehicle rental facility. The gasoline station (Garfield Express) and U-Haul are currently involved in separate environmental investigation requirements under the direction of this Regional Board.

The workplan was submitted to address remediation of these two properties as a single overall strategy for the Lynwood Springs site. The Health and Safety portion of the workplan was reviewed by Mrs. Cynthia Paulo, the Industrial Hygienist of the State Water Resources Control Board.

According to the workplan:

- 1. The lateral and vertical limits of the chlorinated hydrocarbon plume in the soil beneath the site have not been fully assessed.
- The vertical distribution of the product plume in the groundwater is not yet defined.
- 3. The extent of dissolved chlorinated hydrocarbons in groundwater is not yet fully assessed.

The proposed scope of work presented in the workplan to address the above mentioned issues includes the following items:

 Complete a phase II subsurface investigation to assess the vertical and lateral extent of chlorinated hydrocarbons in soil and groundwater. Four offsite groundwater monitoring wells

California Environmental Protection Agency

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption

For a list of simple ways to reduce demand and cut your energy costs, see the tips at: http://www.swrcb.ca.gov/news/echallenge.html

(W&A-MW-1 through W&A-MW-4) will be installed south, southeast and west beyond existing wells, and four soil borings (W&A-SB-1 through W&A-SB-4) will be completed on or adjacent to the Garfield Express property as depicted in figure 6 of the workplan.

- 2. Perform Cone Penetrometer Testing (CPT)/Rapid Optical Screening Technique (ROST) and soil sampling to better define the distribution of separate phase product in the subsurface.
- 3. Conduct High Vacuum Extraction feasibility test to evaluate the effectiveness of this method in reducing residual hydrocarbon concentrations in the vadose zone and the capillary fringe beneath the site. The high vacuum test will be conducted in the most contaminated zone of the Garfield Express property. Three soil borings (W&A-HVW-1 through W&A-HVW-3) will be drilled for installation of high vacuum test wells as shown in figure 6 of the workplan.
- 4. Conduct Enhanced In-Situ Bioremediation field testing to evaluate the potential of in-situ bioremediation method beneath the site under current site conditions. Groundwater will be extracted from well MW-23, treated, mixed with hydrogen peroxide, and injected into well MW-33. The progress of the oxygenated water will be monitored in well W&A-MW-5.
- 5. Collect preliminary discrete-depth water quality field readings from existing wells to be used in preparing for aquifer and bioremediation tests.
- 6. Prepare a site conceptual model that includes a sensitive receptor survey and groundwater fate and transport analysis using the soil and groundwater test results to calculate contaminant cleanup levels.
- 7. Prepare a remedial action plan to develop the most cost effective remediation strategy for the site.

We concur with the workplan as presented with the following comments:

I. Site Assessment

Four offsite groundwater monitoring wells (W&A-MW-1 through W&A-MW-4) will be installed south, southeast and west beyond existing wells, and four soil borings (W&A-SB-1 through W&A-SB-4) will be completed on or adjacent to the Garfield Express property as depicted in figure 6 of the workplan.

- Quarterly Groundwater monitoring from these new wells must be performed by the City of Lynwood and in coordination with Garfield Express and U-Haul groundwater monitoring program.
- 2. Soil samples must be collected at five-foot intervals in all soil borings for geologic logging purposes. However, they do not need to be prepared for chemical analysis.
- 3. All groundwater samples must be analyzed by EPA Method 8015 for TPH-g (gasoline), and EPA Method 8260B for BTEX, methyl tertiary butyl ether (MTBE), di-isopropyl ether

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(DIPE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA). In addition, all other constituents detected between method detection limits (MDL) and the estimated quantifiable limits (EQL) must be reported (see the attached laboratory requirements dated 6/22/2000). Please report all groundwater data in micrograms per liter (μ g/L). All analytical data must be reported by a California certified laboratory.

4. Construction and development of groundwater monitoring wells must comply with the requirements prescribed in California Code of Regulations (CCRs), Title 23, Division 3, Chapter 16, Section 2649 (copy enclosed).

- 3 -

- 5. Any wells containing free product must be purged to remove any standing product, allowed to equilibrate to pre-purged levels, and free product thickness measured and recorded. If free product is present, it must be removed pursuant to Title 23, California Code of Regulations, Division 3, Chapter 16, Section 2655.
- 6. All groundwater monitoring wells must be surveyed to a benchmark for known elevation above mean sea level by a licensed land surveyor or registered civil engineer. Prior to collecting groundwater samples, free product thickness (if present) must be determined and the depth to water must be measured in all wells to be sampled. Then the wells are to be properly purged until the temperature, conductivity, and pH stabilize, and the water is free of suspended and settable matter, before samples are collected for analysis.
- All necessary permits must be obtained from the appropriate agencies prior to start of the work.
- 8. Please notify the Regional Board at least **7 days** prior to start of the work so that we can schedule one of our staff members to be present during the fieldwork.
- 9. All work must be performed by or under the direction of the registered geologists or registered civil engineers. A statement is required in the report that the registered professionals in responsible charge actually supervised or personally conducted all the work associated with the project. All technical submittals must contain a wet ink signature and seal by one of the registered professionals.

II. High Vacuum Extraction Test

- The three soil borings proposed for a high vacuum extraction test seem to be located too close to each other. Therefore, obtaining accurate data, evaluating the applicability of this method, and estimating the radius of soil vapor extraction influence may not be possible. Please revise and resubmit your plan 15 days prior to start of work for our review and concurrence.
- 2. High vacuum extraction shall be performed in coordination with the BIO-VEP system currently in operation at the Garfield Express site.

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III. In-Situ Bioremediation field testing

The workplan proposal to inject hydrogen peroxide into the subsurface is not approved at this time.

- 1. Hydrogen peroxide injection in the subsurface shall not be performed in areas where free product exists.
- Prior to implementing hydrogen peroxide injection, and in accordance with section 13260 of the California Water Code, a Report of Waste Discharge must be filed, and a valid waste discharge requirement (WDR) must be obtained from this Regional Board. You may contact Mr. Kwangil Lee, Non-NPDES Unit at (213) 576-2269 for WDR Application.

IV. Health and Safety Plan

The health and safety plan submitted as part of the workplan indicates that 3,000 gallons of decontamination fluids will be collected during the site investigation. However, no spill containment program was addressed. Please submit a spill containment program to supplement your health and safety plan 5 days prior to start of work.

If you have any questions concerning this matter, please call Mr. David Bacharowski at (213) 576-6607 or Mr. Arman Toumari at (213) 576-6758.

Sincerely,

Original Signed by

Dennis A. Dickerson Executive Officer Ms. Shirley Wolf Lynwood Springs

Mailing List (by e-mail)

Mr. Robert Sams, Office of Chief Counsel, State Water Resources Control Board Mr. Hari Patel, Underground Storage Tank Cleanup Fund, State Water Resources Control Board

Mr. Tim Smith, L.A.County DPW, Environmental Program Division

Dr. Bruce Mowry, Water Replishment District of Southern California

Mr. Louis Ross, Garfield Express

Mr. Josef Solares, State UST Fund Advisory & Services (Woodland Hills Office)

Mr. Brian Alexander, J&B Environmental, Inc. (Phelan Office)

Mr. Arturo Sneider, Primestor Development

Mr. Reid Riner, Amerco Real Estate Company (Phoenix Office)

Mr. Dan Blaes, Blaes Environmental Management, Inc. (Phoenix Office)

Mr. Matt Winefield, Winefield & Associates, Inc. (Long Beach Office)

William J. and Martha L. Steck (property owner)

Ms. Laura Torres (property owner)

Ms. Lillie Jordan (property owner)

First Church of Deliverance (property owner)

Pereza, Maria B et al Ortiz, Benedicto (property owner)

Miguel and Maria Guzman (property owner)

Gabriel O. and Tola Miro (property owner)

Mr. Zeferino Jr. Aispuro (property owner)

Mr. Oliver W. Conner (property owner)

Chae C. and So Y. Cho (property owner)

Bruce and Mia Kang (property owner)

California Environmental Protection Agency

APPENDIX B APPROVED PERMIT APPLICATIONS

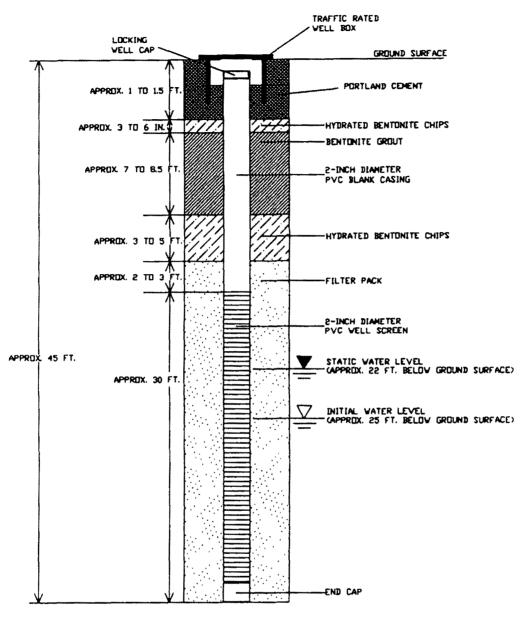
		DR BALDWIN PARK							
	IVIRONMENTAL HEALTH : 2525 Corporate Place - Monten DUNTY OF LOS ANGELES DEPARTMENT OF HEALTH SE	5y Park - 0a 91754 9/706 2/03/03							
==	TYPE OF PERMIT (CHECK)	TYPE OF WELL							
	MNEW WELL CONSTRUCTION	CATHODIC							
	RECONSTRUCTION OF RENOVATION	[] TEST							
Z	☐ DESTRUCTION	COBSERVATION/MONITORING (4)							
PTK	TYPE OF CASING	o, blank and slotted (0.02") PVC							
DESCRIPTION	METHOD OF SEALING OF CASING								
DES	- Hydratid bentonite ch	سيما							
	METHOD OF DESTRUCTION P/A	METHOD OF DESTRUCTION P/A							
	ADDRESS (NUMBER STREET, AND NEAREST INTERSECTION) Property East of Long Brain Bind. South of Glenn Av								
	DIAGRAM (SHOW PROPERTY LINES, STREET, ADDRESS, WELL BITE, SEWE	- EMCIGNATIO CHA 2.386L ATIW QUOLA 2MBT8Y8 LABORS DIAMONG WITH LABELS AND DIMENSIONS. WAS MICHAELS AND PRIVATE BEWAGE DIABORS DIABORS DIAMONG WITH LABELS AND DIMENSIONS.							
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OCATION									
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	Z WEA -NIW-1								
	1	let to scale. Please see attached figure.							
	NAME OF WELL DRILLER (PRINT) Prosonic, Corp.	name of well owner iprint) City of Lynwood Redevelopment Agency							
	TRADE NAME	MAILING ADDRESS 11330 Bullis Road							
	BUSINESS AUDRESS CITY	CIV.							
	Signal Hill	Lynwood, CA 90262							
	I hereby agree to comply in every respect with all regulations of the County Preventive/Public Health	DISPOSITION OF APPLICATION: (For Sanitarians Use Only)							
Ļ	Services and with all ordinances and laws of the County	☐ APPROVED ☐ DENIED							
CA	of Los Angeles and of the State of California pertaining to well construction, reconstruction and destruction. Upon	APPROVED WITH CONDITIONS							
APPLICANT	completion of well and within ten days thereafter, I will turnish the County Preventive/Public Health Services with	If denied or approved with conditions, report reason or							
AP.	a complete log of the well, giving date drilled, depth of well, all perforations in casing, and any other data	conditions here:							
	deemet necessary by such County Preventive/Public Health Services	INGED A COPY OF THE WELL CONS							
	11/1/	TRUCTION DIAGRAM AND YOUR.							
	Tribek Mondan	BUSINESS CARD PLEASE							
	Applicant's Signature	CATE SANITARIAN							
	POINT YOUR MAME AND DHING # MAKE	DATE 1 / SECTION CHIEF							
	PRINT YOUR NAME AND PH:NE # 4686 310 578 6788	0 2/7/03 SECTION CHIEF Lui 621/430-							

SERVICE APPLICATION AND FEE COLLECTION **COUNTY OF LOS ANGELES - DEPARTMENT OF HEALTH SERVICES PUBLIC HEALTH PROGRAMS - ENVIRONMENTAL HEALTH**

SERVICE REQUEST APPLICATION

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а	pplication. M	lake mor		able to LOS ANGELI	red non-refundable fee to the ES COUNTY TREASURER, <u>DO</u>
	REQUIRED*		Complete and attach a PRIVATE SEWAGE DIS PRIVATE SEWAGE DIS INSPECTION OF MOUI Forest Service	N. RENOVATION OR Well Permit Applicat POSAL SYSTEM CO POSAL SYSTEM RE NTAIN CABIN SITE a TING PRIVATE SEWA	DESTRUCTION PERMIT ion DNSTRUCTION PERMIT NOVATION/EXPANSION as required by the United States AGE SYSTEM as required by
2. C	Check with Cor	ntact Offi	ice stamped below for re	quirements or inform	ation.
	Complete the rene forms indicate	•	nformation or deliver the	completed applicati	on, money order or check with
to	O: County of I Mountain & Water & Se 2525 Corpo Monterey F (323) 881-4	& Rural Pewage Prorate Pla Park, CA	Program rogram ace, #150	* Refer to Schedul for current fiscal TE: FIELD PERSON	
					eipt, to request an inspection.
11/110	Policant's Name	engbu ed Ro	ach Blud. Exuthol Address Address Address Address Address	20, long Reach, ci	Phone No.
Co F	ngineer Plan (Check No	o Tract No	Lot No	No Bedrooms
OO. L	_		or Private Sewage Disposal		
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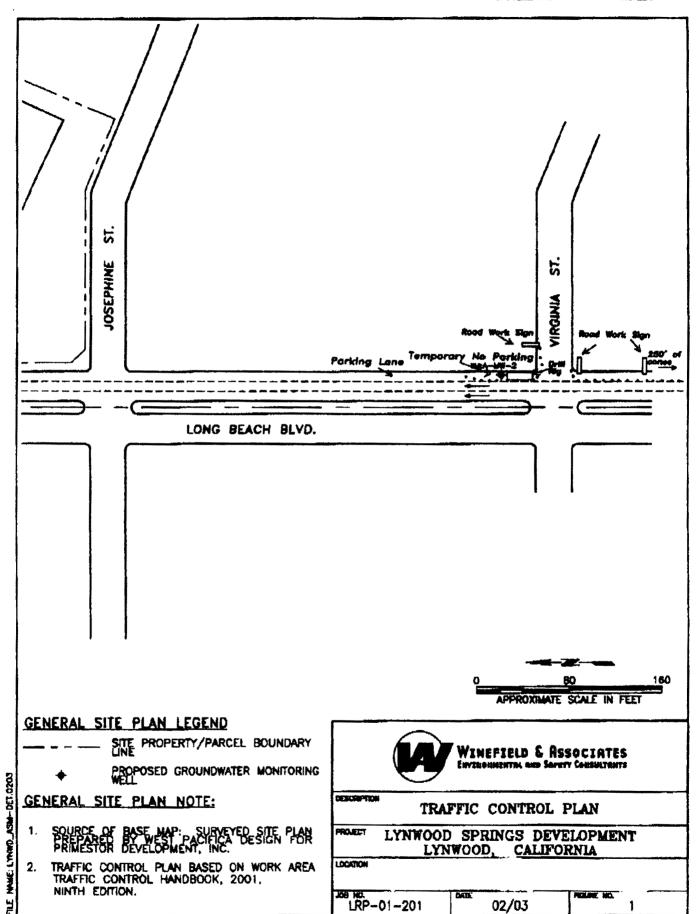
NOT TO SCALE

Project No: LYN-06-202	File: WAI-007 Well Diagram	SCHEMATIC DIAGRAM OF WELLS			
Orown by: WFG	Date: 2/13/03				
Client:	Lynwood	OI WEEES			
11330 B	ullis Road I, CA 90282	WINEFIELD & RESOCIATES ENTERMINENT AND SOUTH TO			
Site:	d Lynwood				
Springs D	evelopment , California	FIGURE 1			

APPLICATION FOR ENCROACHMENT PERMIT

EP 180
Expiration Date 2.4,04

A	pplicant to comp	lete (pnnt)		FEES	
Applicant Proson Mailing address 2475	Cerritos	Ave 755	9 N	Issuance Fee Plan Check Fee	\$ 315.00
City Signal Hill Telephone No \$62-	424-99	Inspection Fee Special Deposit	\$		
Emergency No 562. Start Date 2//0/03	Completion D		0/03	Other Total	\$
OSHA Permit No		A5350			
Insurance carrier (Worker		NA	•		(
Policy No WC 10		84			\
Insurance carner (Liability) Cin cinno	iti In	sylance	6.71/05/	YNWOOD
Policy No 1069-	94-6475			CITY OF 2	-1 /
Location A	SEE ATT	KHED	SKETCH	CITY OF A REDEVEL AGENCY	OPMENT
D. 11 Co		1 2 7 0	1: 25- 11	FAICY	
four groundwat	0011 0000	12.5 CON	olls in	LGENCY	
public rights of		ofmed	JUNA GRACIO		
Contamination	- NWY CV V	V V		1	
ConstJExcavation Item	Std. Plan No.	Longth	Width		
Residential Driveway					
Commercial Driveway					
Curb/Gutter					
Sidewalk					
Asphaltic Concrete					
Conduit					
Other				Applicant to provide skett	• •
Other				and scope of work (as requ	ilred) Sketch to show
	ļ			proximity to nearest major	intersection
	<u> </u>		<u> </u>		
		APLLICA	NT'S DECLA	RATION	
Application is hereby made provisions of Section 13-11 c	to encrosch into of Title 13 of the Ly	the public i	right-of-way at Hopal Code an	the above-described location(4) id any attachments herato.	amplect to all abblicable
need harmless by the applica or occurring as a proximate responsibilities are hareby at	nt from ony liability result of any wor soumed by the spi future use of the	or respons k or activities dicent App highway by	ubility for any s us undertaken licent further w y the general s	the City of Lynwood, its officers scident, loss or damage to porsor pursuant to the permit, and that grass that, if any part of the work tublic, it shall be remayed or reloasings.	is or property, happening all of said liabilities and or installation authorized
Applicant states that the rave	irse aide of this En	croschmen	t Permit has be	en read and understood	
Call office of the City Engine	or (310) 803.0220 Jel				
Signature of Applicant	10	2-4-03			
PERMIT APPROVAL AND A	CCEPTANCE OF	NORK			
ancreach upon of perform we	ork within designat	ed public (19	ght-of-way in th	and any attachments hardlo, as City of Lynwood. This parmit sh	el pecome null end void ermission is granted to
Approved by	me			010	
was inspected and acco	pprod by Line City.	<u> </u>	O		
inspector's Signature			¤	ate	



APPENDIX C DRILL LOG LEGEND AND DRILL LOGS

DRILL LOG LEGEND

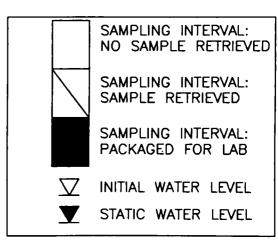
UNIFIED SOIL CLASSIFICATION SYSTEM

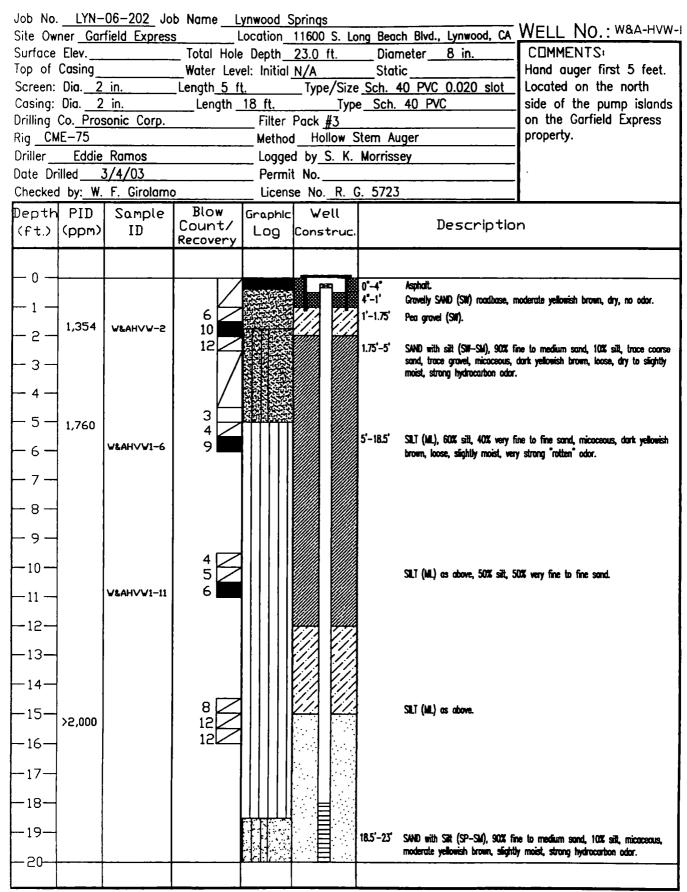
Major Divisions	Symbols	Descriptions					
	GW	WELL GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES.					
Gravels	GP	POORLY GRADED GRAVELS OR GRAVEL-SAND MIXTURES, LITTLE OR NO FINES.					
Graveis	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES.					
	GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES.					
	SW	WELL GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES.					
Sands	SP	POORLY GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES.					
Sullus	SM	SILTY SANDS, SAND-SILT MIXTURES.					
	sc sc	CLAYEY SANDS, SAND-CLAY MIXTURES.					
	ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, OR CLAYEY SILTS WITH SLIGHT PLASTICITY.					
Silts & Clays	CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS.					
Liquid Limit < 50.	OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY.					
	МН	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS.					
Silts & Clays	СН	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS.					
Liquid Limit > 50.	ОН	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS.					
Organic Soils	Pt Pt	PEAT OR OTHER HIGHLY ORGANIC SOILS.					

CONSTRUCTION

CEMENT BENTONITE GROUT BENTONITE CHIPS FILTER PACK WELL SCREEN SLUFF TRAFFIC RATED WELL BOX LOCKING WELL CAP

SAMPLING





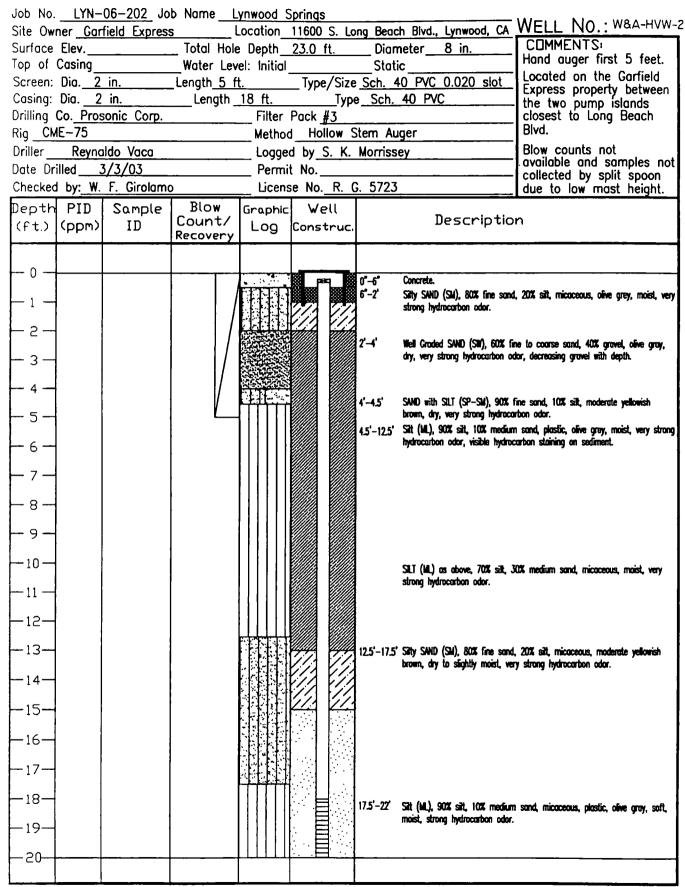


LYN-06-202, Lynwood Springs, Lynwood, CA

WELL NO.: W&A-HVW-1

Depth		Sample	Blow Count/	Graphic	Well Construc.	Description
(7 0.)	CDDIN	110	Count/ Recovery	Log	·	
-20-			·	20 Su & GEORGE		
-21-						
22			8/2			
-53-	1,383	VLAHVV1-23	14 16			Bottom of soil boring and sampling interval at 23.0 ft.
-24-						
-25-				,		
56						
-27-						
-28-						
-29-						
30-						
-31-						
-32-						
-33 -						
-3 4 -						
- 3.5-						
-36-						
37-						
-38-						
-3 9 -						
- 40-						
-41-						
-42-						
-43-						
44-						
— 45—						
-45 -46-						
70						

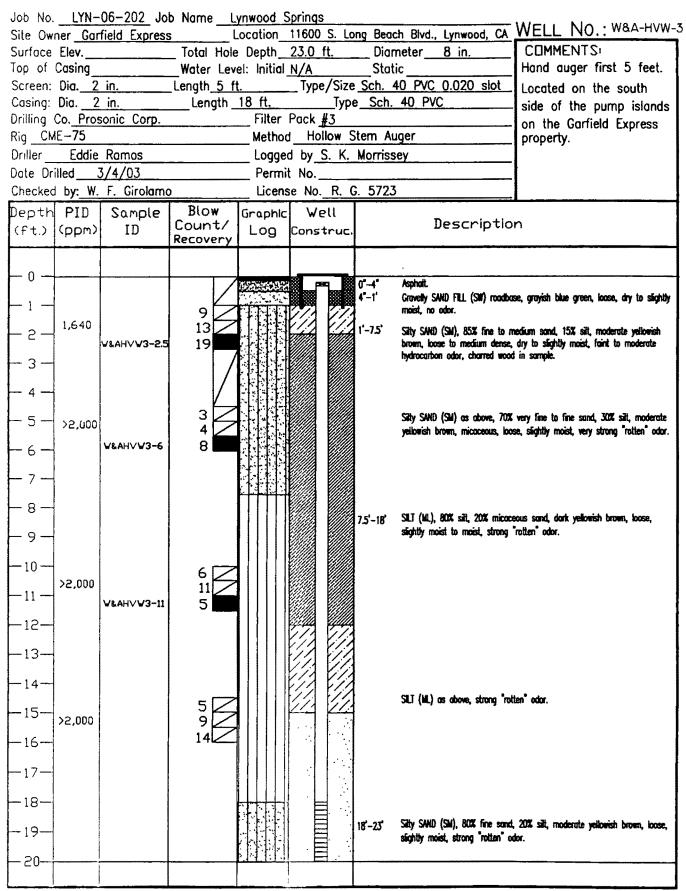




LYN-06-202, Lynwood Springs, Lynwood, CA

WELL NO .: W&A-HVW-2

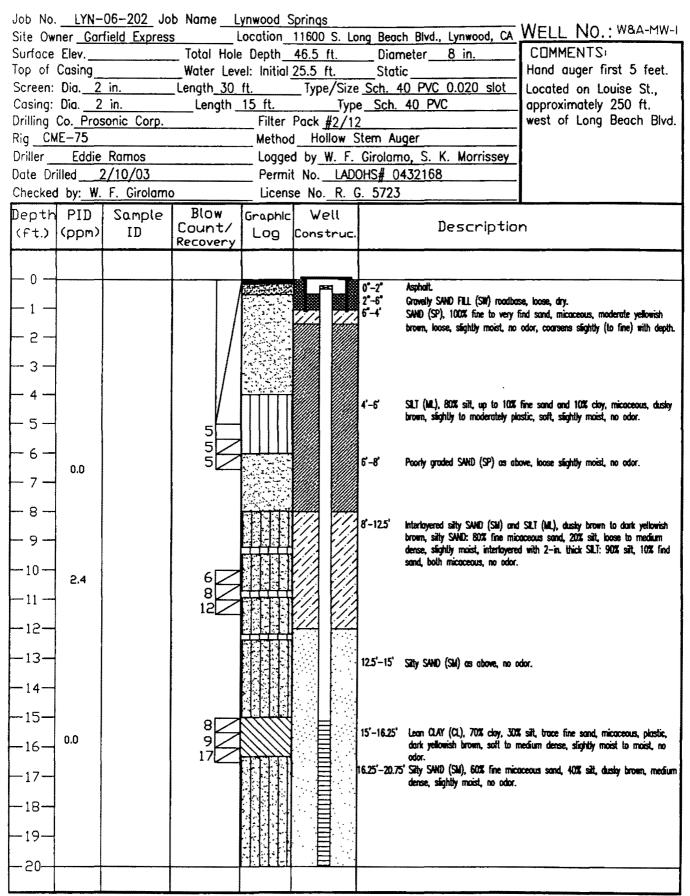
Depth (ft.)	PID	Sample ID	Blow Count/	Graphic	Well Construc.	Description
., .,			Recovery			
2o						SILT (ML) as above, moderate yellowish brown, strong hydrocarbon odor.
-21-						Battom of sampling interval at 22.0 ft.
–s 2 –	420	AFWHAAA.	bataolica clama?			Bottom of soil boring at 23.0 ft.
-23		:	Sample collected from bottom of auger.			
-24-		,				
-25-		-				
26						
-27-		*				
-85						
-29-						
-30-						``
-31-						
-35-						
-33-						
34						
-35-						
-36						
- 37-						
-38-						
-39-						
- 40-						
- 41-						
42						
 43						
-44-						
- 45-						
- 46						



LYN-06-202, Lynwood Springs, Lynwood, CA

WELL No.: w&A-HVW-3

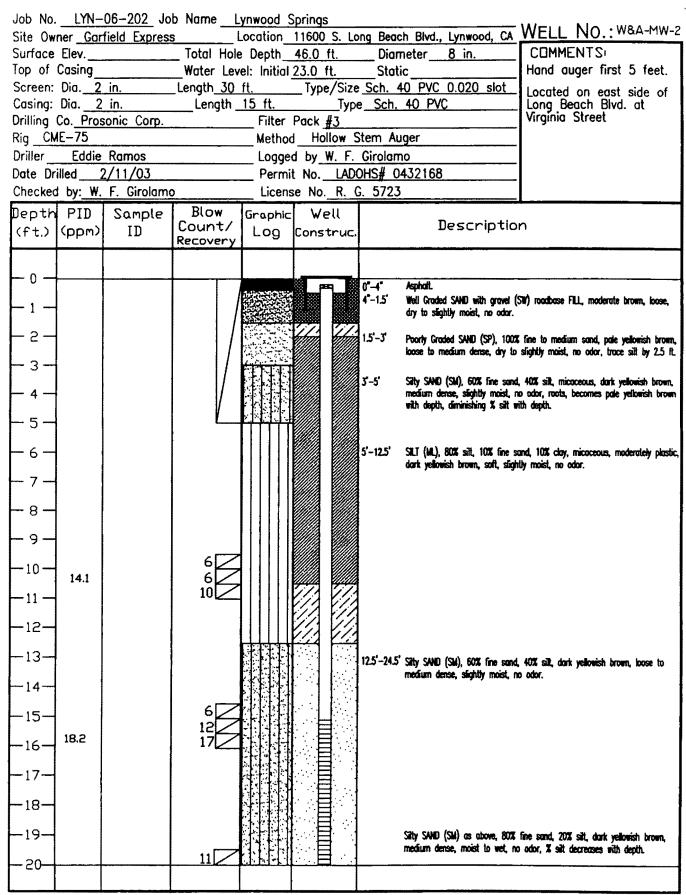
			ngs, Lynwoo		V 11	WALLE INC. WAA-HVW-
Depth (£+)	PID (ppm)	Sample ID	Blow Count/	Graphic Log	Well Construc.	Description
(1 (.)		15	Recovery	209	00/19 (/ 4/4)	
-20-				escent to a		
-21-	>2,000		7 10			
-55-	72,000	V&AHVV3-22.5	13			Bottom of sampling interval at 22.5 ft.
-53-				elitica -		Bottom of bopring at 23.0 ft.
-24-						
25-						
-26						
27-						
-88						
-29-						
30-						٠,
31-						
-32-						
33-						
34						
35-						
-36-						
-37-						
38-			:			
39-						
40-	:					
41-						
42-						
43-						
44-				:		
45-						
-46-						



LYN-06-202, Lynwood Springs, Lynwood, CA

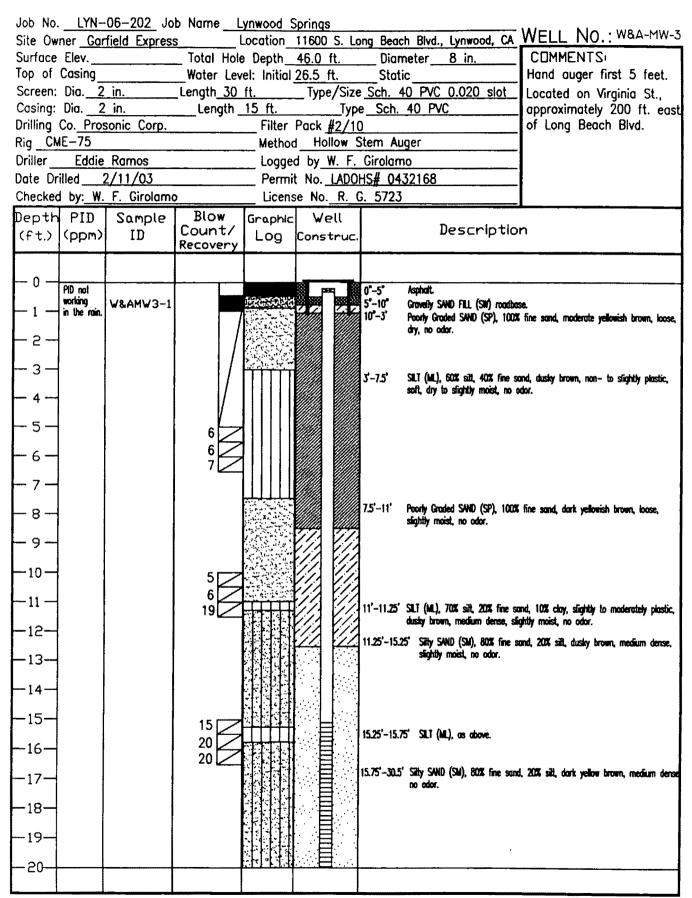
WELL NO.: W&A-MW-1

Depth (ft.)		Sample ID	Blow Count/	Graphic	Well Construc.		Description
(1 0.2	(pp///	15	Recovery	Log	00/13 (1 0.0.		
-20-			71/	ersel i	· :		
-21-	6.6		7/2			20.75'-21.2	5' SILT (ML), 80% micoceous silt, 20% clay, plastic, dank yellowish brown, soft,
			9 🖊				slightly moist to moist, no odor.
-55-	4.6		8 10			21 251 251	5' Afternating Sity SAND (SM) and SILT (ML) in 3 to 6 inch layers. Moist to
-53-			16			21.23 -32.	wet, no odor, becomes light ofive gray with depth, becomes saturated at 25.5°, with some interloyered poorly graded find SAND (SP).
-24-	0.0		12 15				ZAZO, SIGII SAIRE SECRASPECTO POORTY GLOBEST INICI SPICE (SI).
-25-	0.0		16 9	現在を (∑ 25.5	
-26-		05-1WMA#W	10 18				
27-			192				
28							
29							
30-			9				Alternating sitly SAND, fine to medium sand, as above, and SiLT (ML) as above, ofine grey, loose to medium dense, wet to saturated, no odor, layers
31-	0.0		2i				up to 6 inches thick.
-35-							
33-						32.5'-37.5'	SAND (SM) with Silt, 90% fine to medium sand, 10% silt, olive gray,
34-							medium dense, wet to saturated, no odor, microceous.
35-			10				
-36	0.0		19 24				
			33				
-37-				ITI			
38					冒	37.5'-41'	Sithy SAND (SM), 70% fine to medium sand, 30% sit, olive grey, medium dense, wet to saturated, no odor. Grades to:
39-							
40-			11				
41-	0.0		17 22				
42-			2212		[1] / E	41'-43'	Poorty Graded SANO (SP), 100% fine to coarse sand, alive gray, medium dense, saturated, no odor, heaving sands.
43							•
						43'-46'	Lean CLAY (CL), 80% ckey, 20% sit, grayish alive green, medium dense,
44							saturated, no odor. Grades to:
45-	0.0		10		D	46'-46.5'	Sity SAND (SM), 70% fine sand, 30% sit, olive gray, medium dense,
46-			15 16				saturated, no odor. Bottom of boring at 45.0 ft.
			.00	Y il de d'A			Bottom of sampling interval at 46.5 ft.



	(Graphic	Blow	Sample	PID	Depth
Description	~uc.		Count/ Recovery		(ppm)	
			13	V&AHV2-20.5	138	-20-
			16		136	-21-
						ss
23.0 ft.	✓ 230					-23-
						-24-
-27.5' Poorly Graded SAND (SP), 100% fine to medium sand, dark yellowish brownedium dense, saturated, no odor.	24.5'-27.5		13 17			-25
modern early, squarum, to our.			20		851	- 56-
						-27-
-32.5' SAND with Sit (SP-SM), 90% very fine to fine sond, 10% sit, dark yellowish brown, loose to medium dense, saturated, faint peaty odor.	27.5'-32.5					-28
becomes alive gray with depth.						-29
			9 10			- 30-
			14		32.9	-31-
						-32-
-40.75' Poorly Graded SAND (SP), 100% fine to medium microceous sand, alive gr	32.5'-40.7					-33-
medium dense, saturated, no odor, some zones with up to 10% silt.						-34-
			11 14			-35-
			30		48	-36 -
						- 37-
						-38-
						-3 9 -
			5 6 6			 40
'-42.5' SUJ (ML), 80% silt, 10% clay, up to 10% fine sand, moderately plastic,	40.75'_42		6		14.3	 41
soft, wel, no odor.	70.75 -42.					-42
•						- 43 -
saturated, no odor, some zones of medium to coarse sand, some zones	12.5'-46'					-44
with up to 1005 sit.			7			45
	de d		9 🖊		135	70

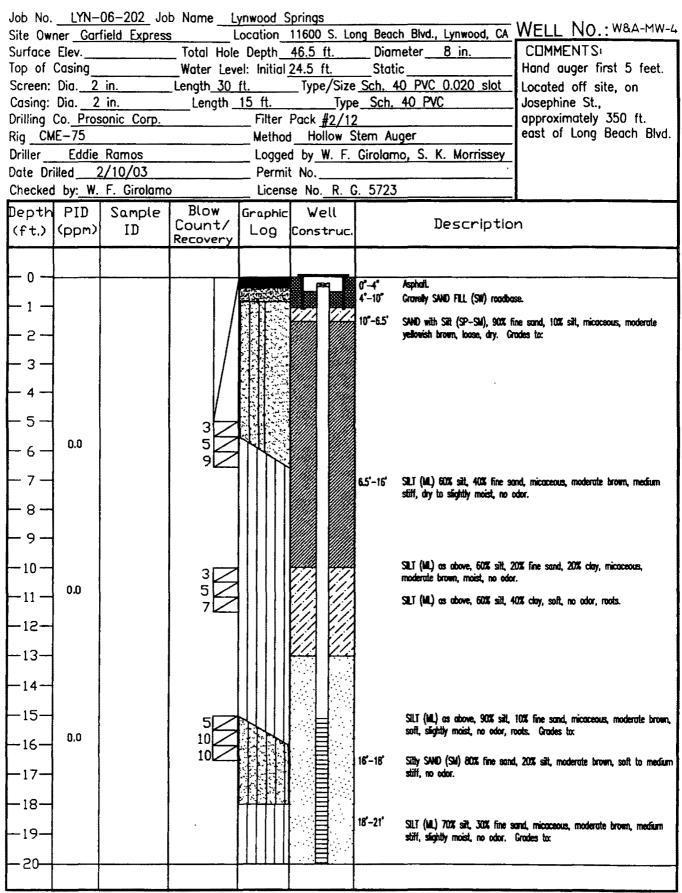




LYN-06-202, Lynwood Springs, Lynwood, CA

WELL NO.: W&A-MW-3

	PID ppm>	Sample ID	Blow Count/	Graphic Log	Well Construc		Description
	' '		Recovery				
1-20-			8				
-21-			8				Sity SAND (SM) as above, about 80% fine sand with varying % sit with depth (20-40%), dark yellowish brown, medium dense, maist, no ador.
-55-			15 16				
-53-			20				•
-24-			6				
-25-		V&AMV3-25	10 13	39350 39350			Sity SAND (SM) as above, with interloyered thin loyers (up to 3 inches) of fine SAND (SP), wet, no odor.
-26-			0	31111111111111111111111111111111111111		▽ 26. 5	
-27-		!				200	
-28-							
-29-							on our fed
-30-			12				Sity SAND (SM), as above, ofive grey.
-31-			16			30.5'-39.75'	Poorly Graded SAND (SP), 100% fine to medium sand, olive gray, medium
-32-							dense, saturated, no odor, becomes dark yellowish brown below 31.25°.
-33-							
-34-		!					
-35-			12				
36-			24				Poorly Graded SAND (SP), as above, 100% fine sand, trace medium sand, medium gray, medium dense, saturated, no odor.
-37-						ļ	
-38-							
-39	}						
-40-			10	11111		 39.75'-42.5'	Lean CLAY (CL), 70% clay, 30% sit, plastic, medium dark gray, medium
-41-			10				stiff, moist to wet, no odor, becomes stiffer with depth.
-42			13				
-43-	İ		13			425'-43'	Sity SAND (SM)
-44			16 24			43'-45'	Poorly Graded SAND (SP), 100% fine sand, trace silt, medium dark gray, saturated, no odor.
-45							
46			5 11			46'-46.5'	Lean CLAY (CL.), 60% clay, 30% sit, up to 10% fine sand, plastic, medium dark gray, medium stiff, wet, no odor.
-			20			<u> </u>	Bottom of boring at 45.0 ft. Bottom of sampling interval at 46.5 ft.





LYN-06-202, Lynwood Springs, Lynwood, CA

WELL NO.: W&A-MW-4

Depth (ft.)	PID (ppm)	Sample ID	Blow Count/	Graphic	Well Construc.		Description
			Recovery				
-20- -21- -22-	0.0		7 7			21'-24'	Sity SAND (SM) 80% fine sand, 20% sit, moderate brown, loose, moist, no odor, decreasing % sit to 10% by 24 feet. Grades to:
-53-	0.0		8	7			
24- 25-		V&AMV4-25				☑ 24.5 24'-27.5'	SAND with Silk (SP-SM) 90% fine sand, 10% silt, microceous, ofive gray,
26	0.0	W&A-ER-1	10				loose, wet, no odor, moderate yellowish brown with depth.
-27-							
-2 9 -						27.5'-32.5'	Interloyered sitty SAND (SM) and SILT (ML), sand with 10% sitt, and sit with 30% sand, micaceous, olive gray, medium stiff, saturated, no odor.
—30—			9 🔽				
31	0.0		16 22				
-35-						32.5'-46'	SAND (SP), 100% fine to medium sand, some intertoyered 1 inch-thick silty
33- 34-				sate e si		JZJ ~70	sand layers with 30% sit, angular to subangular, ofive gray, medium dense, saturated, no odor.
-35-			9 🖊				
-36-	0.0		18 29				
−37− −38−							
-39-							
 40			10				SAND (SP) as above, 100% medium to coarse sand, olive gray, angular to subangular, medium dense, saturated, no odor, finer with depth to 90% fine.
41-	0.0		10 14				sand and 10% salt by 41.5 feet.
42- 43-							
- 44							
 45			18				SAND (SP) as above, 100% medium to coarse sand, angular to subangular,
- 46-	0.0		24 27	11 111		46'-46.5'	grayish brown, medium dense, saturated, no odor. Grades to: Sithy SAND (SM), 50% very fine sand, 30% silt, 20% clay, ofine gray, medium dense to dense, no odor.



Job No.	. LYN	06-202 Jo	b Name Ly	ynwood S	Springs			14.1. N
Site Ow	ner <u>Gar</u>	field Express	<u> </u>	ocation_	11600 S. Lo	ng Beac	h Bivd., Lynwood, CA	WELL NO .: W&A-SB-I
Surface	Elev	····	_ Total Hole	Depth_	31.0 ft.	Dian	neter <u>8 in.</u>	COMMENTS
Top of	Casing_	Hand auger first 5 feet.						
Screen:	Dia	Located by the west wall						
Casing:	Dia.	of the laundromat on the						
Drilling Dia CN	Co. <u>Pros</u>	Garfield Express property.						
Driller	AE-75 Eddie	Boring abandoned using						
Date Dr	rilled	3/4/03		Loggo Permi	t No	MOTTISS	<u></u>	bentonite grout.
Checked								
		Sample			Well			
	(ppm)		Count/		Construc.		Description	n
(1 6.7	(PP)	1.2	Recovery		CONS OF GC.	·		
		l]]	ŀ		
<u></u>	 			新聞別國際	L	0"-3"	Asphalt.	
<u></u>	113.5		14			3-6"		to fine sand, 40% silt, moderate yellowish
		W&ASB1-1 W&ASB1-1.5	34			6"-5'	brown, dense, dry to slightly mo	
<u></u> ⊢ 2 −		(Physical)	28			6 -3	loose, dry, no odor, increasing ?	ne sand, 10% sitt, moderate yellowish brown, % sitt with deoth.
L ₃ -]		/				•	·
1	i	,	/					
- 4 -	-		/ /					
L ₅ -			4					
	,,,,	M ØW2DI_2	5				en our (out oer a	
-6	ł	₩&ASB1-5.5	9			5'-7.5'	Sity SAND (SM), 80% fine sond, brown, no odor.	, 2001 silt, micoceous, moderate yellowish
_								
<u></u> 7 −	1				l			
- 8-	ł				[7.5'-12.5'	SAND with sait (SP-SM), 95% fir	ne to medium sand (mostly fine), 5% silt,
	Ì						micaceous, moderate yellowish b staining.	rown, loose, dry, no odor, with innoxide
9-	1						2000 mily	
-10-	183.3		8					
	1	W&ASB1-10.5	13 16					
11 -	1		10					
L ₁₂ -								
						l		
-13-	1					12.5°-17.5° 	SILT (ML), 85% silt, 15% fine s medium dense, slightly moist, s	sand, micaceous, plastic, dark yellowish brown no odor.
-14-								
"]							
-15-	i		7					
-16-	114.9		15					
	}	W&ASB1-16	28					
17-	1	(Physical)						
						4751 24 24	CIL. CAID (OA)	
-18-						17.5'-22.5		K very fine to fine sand, 20-30% silt, brown, loose to medium dense, slightly moist
L ₁₉ -							moderate hydrocarbon odor.	
-20-				0.0194				
	L							



LYN-06-202, Lynwood Springs, Lynwood, CA

WELL No.: W&A-SB-1

Depth		Sample	Blow	Graphic	Well		- · · · · · · · · · · · · · · · · · · ·
	(ppm)		Count/ Recovery		Construc.		Description
		·	12	-	·		
-20-	>2,000	V&AMW1-20.5	14			-	
-21-		W&AMW1-21 (Physical)	20		i	:	
-55-		·					
-23-		•				22.5'-25'	SILT (ML) with sand, 85% silt, 15% fine sand, plastic, microceous, dark yellowish brown, medium dense, slightly moist, no odor, grades into.
-24-							
– 25–	/5 000	V&AMV1-25.5	11 16			▽ 25.0	
<u> </u>	/2,000		332			25'-31'	Sity SAND (SP-SM), 80% very fine to fine sand, 20% sit, micaceous, trace medium sand, dark yellowish brown, medium dense, wet, moderate
27-		,					hydrocarbon odor, iron oxide staining.
28-							
-2 9 -							
— 30 —	>> 000	VRAMV1-30.5	9				
— 31 —	72,000	V&AMV1-30.5 (Physical)	58				Bottom of boring and sampling interval at 31.0 ft.
— 32—	!						
—33 —							
-34-		:					
— 35—							
—36 —							
-37-							
-38-					;		
-39-							
40							
							
<u> 42 </u>							
43					,	•	
44							
 45-							
- 46							



Casing: Drilling Rig CM Driller	ner <u>Gar</u> Elev Casing _ Dia Dia Co. Pros Reyno	WELL No.: W&A-SB-2 COMMENTS: Hand auger first 5 feet. Located near the east wa of the laundromat in a vacant lot east of the Garfield Express property.						
					t No se No. R. (Boring abandoned using bentonite grout.
Depth		F. Girolamo Sample ID		Graphic	T		Descriptio	
- 0 - - 1 -			4			0'-4'	Sity SAND (SM) 60% very fine yellowish brown, loose, slightly (to fine sand, 40% silt, micaceous, dank moist, no odor.
- 2 - - 3 - - 4 -		V& ASB2-2.5	7					
5 6 7		V&ASB2-6. 5	3 5 6			4'-11'	Poorly Graded SAND (SP), 100% yellowish brown, loose, dry, fain	fine to medium sand, micaceous, moderate t hydrocarbon odor.
- 8 - - 9 - -10 -	22.4	₩&ASB2-11.5	4 6					
—12 — —13—						11'-22.5'	SILT (ML), 90% sit, 10% media brown, soft, moist, no odor.	um sand, micaceous, plastic, moderate olive
-14- -15-			4 🖊					
16- 17-			4 4				SLT (ML) as above, very stron	ig hydrocarbon odor.
-18-								
-19-								
-20-								

LYN-06-202, Lynwood Springs, Lynwood, CA

WELL NO .: W&A-SB-2

Depth		Sample	Blow	Graphic	Well	71 EEE 110.1 WAA 3B 2
(ft.)	(ppm)		Count/ Recovery		Construc.	Description
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
-50-			2			SILT (ML) as above, very strong hydrocarbon odor, plant roots.
-21-	384		6 10			SILL (ML) US GROWS, Way Salving Hydrocarbon Good, park 1000s.
-22-			10 2			
1						22.5'-36.5' Sithy SAND (SM), 50% fine to medium sand, 50% sit, micaceous, moderate
-53-						olive brown, loose, wet, very strong hydrocarbon odor.
-24						·
-25-			6 🔽			▽ 25.0
-26-	350		6 9			Sitty SAND (SM) as above, trace gravel, dank olive gray, loose saturated, moderate hydrocarbon odor.
-27-		V&ASB2-26.5	9			
-28						·
-29-						CT 0117 (CO)
30-	1,381	·	7			Sity SAND (SM) as above, trace gravel, dark ofive gray, loose saturated, moderate hydrocarbon odor.
-31-			9			
32			72			
-33-						
1						
34						
35			8			Sithy SAND (SM) as above, moderate hydrocarbon odor.
-36-	174		8 8			Bottom of boring and sampling interval at 36.5 ft.
37-				L. Laboret		
-38-						
39						
40-						
-41-						
-42-						
-43-						
44-						
45-						
46-						

Job No.	LYN	06−202 Jo	b Name <u>Lyn</u> v	wood S	Sprinas			
Site Own	er <u>Gar</u>	field Express	Loc	ation_	11600 S. Lo	ng Bead	ch Blvd., Lynwood, CA	WELL No.: W&A-SB-3
Surface	Elev		_ Total Hole D	epth_	31.0 ft.	Diar	neter <u> </u>	CUMMEN I S:
Top of C	Casing_		Water Level:	Initial	24.25 ft.	Stat	ic	Hand auger first 5 feet.
								Located on the west side
Casing:	Dia	<u> </u>	Length	<u></u>	Typ	e		of the Garfield Express
Drilling C	io. <u>Pros</u>	sonic Corp.	 	Filter	Pack	N	ıger	property adjacent to
Rig CMI	<u>- 73</u>	<u> </u>		Method	Hollow S	otem AL	iger	Long Beach Blvd.
Driller	Faaie	<u> </u>		Logge	a by w. r.	Girolan	10	Boring abandoned using
					e No.R. (bentonite grout.
). J/ZJ) 	bentonite grout.
Depth		, ,	10+/1	raphic			Description	n
(ft.)	(ppm)	ID	Recovery	_og	Construc.		203C 15 110	•
$\vdash \circ \dashv$						A 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	- A	
		W&ASB3-1				0"-8"	Concrete.	
		WWH3D3 I	7		}	8°-7.5'	Poorly Graded SAND (SP), 100%	fine sand, ofive gray, loose to medium
-2			/優				dense, slightly moist, moderate	to strong hydrocarbon odor.
1 1			/ 🔯					
<u></u> ∃ 3 − 1								
4-			/ 🗿					
├ 5 -	186		3 6				Poorly Graded SAND (SP) as ab	ove, moderate hydrocarbon odor.
		V&ASB3-6	10					
F 6 -		44.1020			ł			
F-7-					1			
			772	1111				
8					1	7.5'-14.5'	Silty SAND (SM) 60 to 80% very	r fine to fine sand, 20 to 40% silt, ntent high, clive gray, loose, slightly moist,
L 9 -							faint to moderate hydrocarbon of	odor. X silt varies with depth.
			5					
10	142		6					
11 -		W&ASB3-11	6					
''								
12-				111				
L ₁₃ -								
1-13-								
-14-			1	FIFE				
			9	4.1.1		44 Fl	CHT //a / AAU . TO . COM A	and advanced that the first
15	į		11	11-14		14.5'-15'	Sill (ML), 90% silt, 10% fine s moist, very faint hydrocarbon o	and, micoceous, grayish brown, soft, slightly dor.
16	145	₩&ASB3-15.5	18 🔼 🚶	1111		. 	. , ,	
						15'-22.5'		l, 40% silt, lesser medium sand, trace coarsi yellowish brown to grayish brown, loose,
17-				111			medium dense, no to very fain	t hydrocarbon odor.
18-	,			1411				
1_10_								
-19-								
			8 📑					
20-				<u> </u>			· · · · · · · · · · · · · · · · · · ·	
<u></u>								



LYN-06-202, Lynwood Springs, Lynwood, CA

WELL No.: W&A-SB-3

Depth (f+)	PID (ppm)	Sample ID	Blow Count/	Graphic Log	Well Construc.	Description
(1 0.7	(444)	1.5	Recovery			
-20-	56		10 14			Silty SAND (SM) as above, very faint hydrocarbon odor.
21			1712			
22						
53-						22.5'-24.25' SLI (ML), 90% sit, 10% fine sand, soft, moist, grayish brown, very faint hydrocarbon odor.
-24-						▼ 24.25
-25	611	V&ASB3-25.5	13/2			as art are the state and a country (CO) 100% are and have to refer the
-26		₩883-26	26			24.25'-27.5' Poorty Graded SAND (SP), 100% medium sand, loose to medium dense, saturated, strong hydrocarbon odor with possible product in sediment.
-27-						
-28-						27.5'-31' SAND with sift (SP-SM), 90% fine sand, 10% sitt, olive black, medium dense, saturated, strong hydrocarbon odor.
-29-						CONST. SAMEUDA, SAVINY IT/MUCANIANI CAMI.
-30-	477	V&A SB3−30	8 17			
-31-			20			Bottom of boring and sampling interval at 31.0 ft.
-32-						
-33-						
-34-						
-35-						
- 36-						
37	·				ŀ	
_3 8 _						
3 9- -						
 40						
-41 -						
-42-	:					
-43-	•					
44		:				
45						
46						

Job No.	LYN-	06-202 Jo	b Name <u>L</u>	ynwood S	Springs	ong Rego	h Blvd. I vnwood. CA	WELL No.: W&A-SB-4
Surface	Flev	noid Express	Total Hole	Denth	31 0 ft	Dian	neter 8 in	COMMENTS:
Top of (Casina		_ Water Levi	el: Initial	21.0 ft	Stati	c	Hand auger first 5 feet.
Screen:	Dia.		natarcon lenath	J	Type/Size	0.0		l ·
Casina:	Dia.		Length		'JP''/ 5.20 Tvo:	, B		Located on the west side
Drilling (Co. Pros	sonic Corp.		Filter	Pack			of the Garfield Express
Rig CM					Hollow S	Stem Au	ger	property near Louise St.
-		Ramos						
Date Dri	lled	3/3/03		Loggo	t No	<u> </u>		Boring abandoned using
Checked	by W	F Girolama)	licens	e No R (5723		bentonite grout.
			Blow		1). <u>0/20</u>		3
Depth			Count/	Graphic			Descriptio	n
(ft.)	(ppm)	ID	Recovery	Log	Construc.			
				_				
$\vdash \circ \dashv$, , , , ,					
						0 -2	Asphalt.	l (f) I
<u>├</u> 1 -			l /			2"-1"	Well Graded SAND (SW) with gra	
			/		ļ	1'-9.75'		fine sand, micaceous, pale yelllowish brown, odor, some light brown iron oxide staining.
$\vdash z \dashv$		r				1	. , . ,	,
├ 3 -								
 			/					
L 5 -			 				Poorty Graded SAND (SP) as ab	ove, trace of silt below 4 ft., no odor.
\square								7,4, 0000 W om omo
 6 -						1		
					ļ			
┣ァ┥					ĺ			
L 8 -					1			
					1			
- 9 -		•			1		D 1 D 1 1 DUD (DD) 1	
i i			4				Poorly Graded SAND (SP) as ab	ove, taint nyarocarbon odor.
	20.1	1	5					
- 11		W&ASB4-11	5			9./5°-15.5° 	very faint hydrocarbon odor.	micaceous, moderately plastic, soft, moist,
''							, , , , , , , , , , , , , , , , , , ,	
-12-								
1								
13-					1			
<u> </u>								
'			40 -		:		SILT (ML) as above, with trace	eand no odes
-15-			10				SET (ME) 65 GOOD, WILLIAMS	san, in the
.	50.0		11 13					
<u> </u>	55.5		13	HH		15.5'-22.5'	Silty SAND (SM), 50% fine son	d, 50% sitt, moderately plastic, olive gray,
L ₁₇							loose to medium dense, moist	
'′]								
-18-								
	Į							
19-	Í							very fine sand, 40% silt, micaceous, olive
-20-			10				gray, medium dense, wet at 2	I ft., no odor.
~				İ			•	



LYN-06-202, Lynwood Springs, Lynwood, CA

WELL NO.: W&A-SB-4

Depth (ft.)	PID (ppm)	Sample ID	Blow Count/	Graphic Log	Well Construc.	. Description
(1 6.7			Recovery	209		
-20-	67.5		12			Sithy SAND (SM) as above.
-21 -		V&ASB4-21	15			21.0 ft. (3m) as above.
-22			l			
-23						22.5'-25.25' SILT (NL), 100% sit, microceous, moderate ofive brown, soft, wet, faint hydrocarbon odor.
-24-						
-25-	368.5		11 16			
-2 6	300.3	₩84584-26	24			25.25'-28.75' Sithy SAND (SM) as above, moderate office brown, suburated, faint to moderate hydrocarbon odor.
-27-						
28						
-29-						28.75'-31' Poorty Graded SAND (SP), 100% fine sand, trace of silt, alive gray, medium
– 30–	477		8 16			dense, saturated, faint to moderate hydrocarbon odor.
−31 −			24			Bottom of boring and sampling interval at 31.0 ft.
_32	,					
–33 –						
- 34-		:				
– 35–			l k			
-36		 				
−37 −						
-3 8						
_3 9 _						
 40		1				
<u> 41 </u>			i			
<u> 42 </u>						
43						
44						
-45-						
-46						
.5						



APPENDIX D
WASTE MANIFESTS

NON-HAZARDOUS WASTE MANIFEST	Generator's US EPA ID No. Not Required	Manifest Document No.	2. Page 1 . of		2261	
37 Generator's Name and Mailing Address						
Lynwood Redeveloment Agency						٠
	wood Ca. 902	62				,
Generator's Phone (310)603-0220 Transporter 1 Company Name	6. US EPA ID	Number	A. Tronsporte	er's Phone		
Pacific Technical Services	· CARDOOSS		ì	984-301	18	
7 Transporter 2 Campany Name	8. US EPA ID		B. Transporte			
9. Designated Facility Name and Site Address	10. US EPA ID	Number	C. Facility's P	'hane		
Crosby & Overton						
1630 W 16th St. Lone Beach CA 9	0810 - CAD028400	Orto:	665	492.54	ıs	
11 Waste Shipping Name and Description			12.5	Containers	13. Total	14 Unit
		-	No	. Type	- Quantity	Wi/Vol
o						ļ
Non Hazardous Waste Liquids			00	ונ זי	0008	5 G
ь			1			
						İ
				· -		
c						ļ
				<u>. . </u>		
q						
				. .		
Additional Descriptions for Materials Listed Aid	pove		E. Handling	Codes for W	astes Listed Abo	ve
1a. Profile #: 25903 - Groundwa	ter					
15. Special Handling Instructions and Additional	Information					
Wear proper protective equil	-	ints or volum	ies are ap	proxim	ate. 24 Ho	our
ernergency telephone riumbe						
Site: 11600 Long Beach Blv	d., Lynwood, Ca.					
5/146285						
16 GENERATOR'S CERTIFICATION: I certify the	materials described above on this manifest are no	subject to federal re-	gulations for repo	rting proper	disposal of Hazorda	ous Waste.
Printed/Typed Name	Signature	111	7.		Month Da	y Year
Malak Mar scay	- Dela	~ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	3 mg		0.3 2.	10.3
17. Transporter 1 Acknowledgement of Receipt of			<u>i?</u>			
Raighti Chek.	Signature R	whe R. C.	. 1		Month Do	Y Yeor 3
18. Transporter 2 Acknowledgement of Receipt of		1	2-7-0			
Printed/Typed Name	Signature				Month Da	y Year
					<u> </u>	
19 Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of re	ceipt of waste materials covered by this mar	ifest except as note	d in Item 19.			
Printed/Typed Name	Signature				Month Day	Year
• ••					1 1	

_	NON-HAZARDOUS WASTE MANIFEST	Generator's US EPA ID No. Not Required.	Manifest Documents	2. Page 1 of		2261		
	Generator's Name and Mailing Address Lynwood Redeveloment Agency 11330 Bullis Road Lyny	wood Ca.	90262					-
	4. Generator's Phone (310)803-0220	-						
	5 Transporter 1 Company Name	i i	ID Number	A. Transporte				
	Pacific Technical Services 7. Transporter 2 Company Name		56630 · · · · · · · · · · · · · · · · · · ·	B. Transporte	-984-301	8		
	77. Transporter 2 Company Name	1		b. Hansporte	: 3 F11011 0			
	9 Designated Facility Name and Site Address Crosby & Overton	10. US EPA	ID Number	C. Facility's P	hone			
	1630 W 16th St.							
		0810 · · · CAD0284	09019		-432-544 Containers	13.		14
	11 Waste Shipping Name and Description			No.	1	Total Quant		Unit W1/Vol
	o. Non Hazardous Waste Liquids			00	i	003	1.8	G
G	b.	The state of the s						
N E			••					
R A T	τ.							
R		* * ********************************		·				
	d							
	Additional Descriptions for Materials Listed Ab 11a. Profile #: 25903 - Groundwar			E. Hondling (Codes for W	astes Listed	Above	
	15. Special Handling Instructions and Additional Wear proper protective equipments		eights or volum	es are ap	mixonq	ate. 24	Hou	ır
	emergency telephone number		•	•	•			
	Site 11600 Long Beach Blv	, ,						
	16. GENERATOR'S CERTIFICATION: I certify the		not subject to federal rec	ulations for repor	ting proper o	isposal of Ha	zardous	Waste.
1	Printed/Typed Name Chicla K More	Signature	nelek hlm	2500		Manth O. 3	Doy 1/.7	03
	17 Transporter 1 Acknowledgement of Receipt of							
	Printed/Typed Name Richard Manscal	Signature	Am R 94	وسيد		Month 103	Doy 1	V.0.7
	18. Transporter 2 Acknowledgement of Receipt of							
	Printed/Typed Name	Signature				Month .	Day	Year
	19. Discrepancy Indication Space							
	20 Facility Owner or Operator: Certification of rec	eipt of waste materials covered by this	nanifest except as note	d in Item 19.			***************************************	•
	Printed/Typed Nome	Signature		أحر		Month .	Day	Year

GENERATOR'S COPY

NON-HAZARDOUS WASTE MANIFEST	1. Generator i US EPA II		Doen OCCO	2. Page	1		2202	-
Generator's Name and Mailing Address Lymwood Redewelornent Agency								
	nwood	Ca. 90721	32					
Generator's Phone (310-803-0220					· · · · · · · · · · · · · · · · · · ·			
Transporte I Company Name Design Technical Standard	6 	US EPA ID N		A Trons	-			
Pacific Technical Services Transporter 2 Company Name	5.	US EPA ID N		B. Transi	<u>562-98</u> corter': P		3	
		US EPA ID N		1				
Designated facility Name and Site Address Crosby & Overton	10	US SPAID N	umD€/	C *ocilit	y i Pheni	•		
1630 W 16th St.	1							
	90810	CAD0294090	19 .		562-43	-	5	14
Wister Shipping Name and Description					No.	Type	Tota Quartity	م مران د مورد
And the second s								
Non-Hazardous Waste Liquids			1	,	005	DN	00250	G
	The second second second second second second second second second second second second second second second se							
Non-Hazardous Waste Solids					.025	Ma	1,2500	ء
								1
an areas and a second as a manifestation of the second and the sec							, yangga atau atau atau atau atau atau atau a	†
				İ				1
Addreson Descriptions for Moterials Listed A	lbove .			E. Hand	ling Code	s lei Wa	sies Listed Above	
11a. Profile #: 25003 - Groundw	nder e				1-15			
11b. Profile #, 25904 - Soil Cutti	ngs Time.			1	,- 14	1		
- Ashari					/ /			
. Special Handling Instructions and Additions			بالمناسبين يساسسا		·		سفاقي الم	
Wear proper protective equ			ites of voitin	ମ ୬ ର ଧାର	appr	cxima	no. ∡4 mo	ا انوبا
emergency telephone numb	000(002) 984-301	on Panch S	Shirt Lumer	י ממל פי	2		-	
Site: Garifield Express Lo	CADON. TIDOS EO	i:A nadrii t	JIVU., LYHWI	ovu, u				
•				·····				
GENERATOR'S CERTIFICATION: I corfly th	n materiob described above on t	Signature	subject to finderal re	equiations for	reparing	propri di	Month Day	You
Prin ud/Typod Nome. Faustin	Gonzales		and	£-45-6	Ka-		10311	Z; 'č
Transporter : Acknowledgement of Rescipt	of Materials	Cina alice		7 7 62		-	Mosth Day	
Printco/Typode Notes u MA TO	iscol	Signature	Jun 1	Mo	1100	سل	1031	य व
. Transporter 2 Acknowledgement of Recorpt			1			1,		
Primad Typed Nama		Signature	\bigcup				v.onth Coy	1
Commence Services						·····		
Claceopancy indication Space								
Facility Owner or Operator: Certification of	receipt of waste majerials co	vered by this rear	ifest except as no	ted in item	19			
	\		7	1			attemp de	بعد رم
Friction, Types Name	Wan.	Signature	1	· · · · · · · · · · · · · · · · · · ·			(15/1)	\$ P
	(7	1					
	TRA	NSPORTER !	* 1		عالمين		75, 1	•
		\ \	IJ.					
Mart St S003 04:2768	++	, UN	XHH					٠.,

APPENDIX E ${\sf CPT/ROST\ LOGS^{\sf TM}\ AND\ WAVEFORMS}$





13049 East Florence Avenue Santa Fe Springs, CA 90670

Phone : 562-903-0055 Fax: 562-903-9005

March 11, 2003

Report Number: 0303-0775

Ninyo & Moore 475 Goodard Irvine, California 92618

Attn.: Mr. Dinesh Rao

DATA REPORT
PIEZOCONE PENETRATION AND
RAPID OPTICAL SCREENING TOOL TESTING
AND RELATED SERVICES
LYNWOOD, CALIFORNIA
PROJECT NO. 204299002

Dear Mr. Rao:

Fugro Geosciences (Fugro) is pleased to present this data report for Cone Penetration (CPT) and Rapid Optical Screening Tool (ROST™) testing at the above-referenced site. CPT/ROST™ provided continuous characterization of stratigraphy and petroleum hydrocarbon distribution at the testing locations. A description of the CPT and ROST™ technologies and a discussion of general ROST™ data interpretation follows. CPT and ROST™ logs and electronic data CD are included as attachments.

Cone Penetration Testing

CPT was performed simultaneously with each ROSTTM sounding and yielded real-time stratigraphic data. CPT is a proven method for rapidly evaluating the physical characteristics of unconsolidated soils. It is based on the resistance to penetration of an electronically-instrumented cone which is continuously advanced into the subsurface. In accordance with ASTM Standard D5778-95, the cone was advanced at a rate of two centimeters per second with the driving force provided by hydraulic rams.

The CPT cone used at this site had an apex angle of 60 degrees with a base area of 15 square centimeters (cm²), and friction sleeve with a surface area of 200 cm². The standard geotechnical sensors within the cone measure tip resistance and sleeve friction in tons per square foot (TSF). The combined data from the tip resistance and sleeve friction form the basis of the soil classification (e.g., sand, silt, clay, etc.).

Soil stratigraphy was identified using Campanella and Robertson's Simplified Soil Behavior Chart. Please note that because of the empirical nature of the soil behavior chart, the soil identification should be verified locally.



Ninyo & Moore Mr. Dinesh Rao Page - 2 - Report No.: 0303-0775



ROST[™] Testing

Fugro Geosciences' ROSTTM Laser-Induced Fluorescence system was used for this investigation to screen soils for petroleum hydrocarbon materials containing aromatic hydrocarbon constituents. The system consists of a tunable laser mounted in the CPT truck that is connected to a down-hole sensor. The down-hole sensor consists of a small diameter sapphire window mounted flush with the side of the cone penetrometer probe.

The laser and associated equipment transmit 50 pulses of light per second to the sensor through a fiber optic cable. The wavelength of the pulsed excitation light is tunable and can be set to wavelengths of 266 nanometers (nm) or to wavelengths between 280 and 300 nm. An excitation wavelength of 290 nm was used for each test during this project.

The laser light passes through the sapphire window and is absorbed by aromatic hydrocarbon molecules in contact with the window, as the probe is advanced. This addition of energy (photons) to the aromatic hydrocarbons causes them to fluoresce. A portion of the fluorescence emitted from any encountered aromatic constituents is returned through the sapphire window and conveyed by a second fiber optic cable to a detection system within the CPT rig. The emission data resulting from the pulsed laser light is averaged into one reading per one second interval (approximately one reading per 2 cm vertical interval) and is recorded continuously. ROSTTM may be operated in single or multi-wavelength mode, depending on project objectives. For this project, ROSTTM was operated in multi-wavelength mode (MWL).

Multi-Wavelength Mode (MWL). In MWL mode, the emitted fluorescence is measured simultaneously at four monitoring wavelengths (340, 390, 440, and 490 nm). The four monitoring wavelengths cover the range of light produced by light fuels through heavy contaminants such as coal tar and creosote and enhance detection of widely ranging product types. The emission data is reported continuously as a total of the fluorescence intensity recorded at each of the four wavelengths. The total fluorescence intensity data is presented in real-time on a computer monitor as a graph of fluorescence intensity versus depth (FVD).

The relative percentage of fluorescence measured at each of the monitoring wavelengths (340, 390, 440, and 490 nm) is plotted continuously on the ROST™ logs as four continuous "color bands". The width of each color band represents the relative percentage of fluorescence emitted by the contaminant at each of the monitoring wavelengths (340, 390, 440, and 490 nm). For general interpretation purposes, lighter aromatic hydrocarbon molecules will emit fluorescence at shorter wavelengths and heavier, longer chained hydrocarbons will emit fluorescence at longer wavelengths.

By comparing the relative percentage ratios generated by known product samples with field data, interpretations of product type can often be made. Utility of product identification is often dependent on the degree of similarity between the reference product and the in-situ product composition.

Reference Solution. The fluorescence intensity of a reference solution placed on the sapphire window was measured immediately prior to conducting each test. This reference solution measurement serves two purposes. First, as a quality control check, the solution is used to ensure that the performance of the system is within specifications. Second, it allows for normalization of the data from different test locations for variation in laser power, operating conditions, and monitored emission wavelength. The reference solution used for this project was the standard M1 reference, which is a proprietary PHC containing solution. M1 provides consistent fluorescence response across the portion of the spectrum analyzed by ROST and therefore, allows the fluorescence data collected to be consistently normalized to intensities recorded as a percentage of M1.



Page - 3 - Report No.: 0303-0775



LIMITATIONS OF ENVIRONMENTAL SUBSURFACE WORK

Fugro Geosciences' report is based upon our observations made during field work, the information provided to Fugro and the results of the ROST/CPT survey. Given the inherent limitation of environmental subsurface work, Fugro cannot guarantee that the site is free of hazardous or potentially hazardous materials or conditions or that latent or undiscovered conditions will not become evident in the future. Fugro's report was prepared in accordance with our proposal and the General Conditions agreed to between Fugro and Client and no warranties, representations, or certifications are made.

Fugro Geosciences, Inc. appreciates the opportunity to be of service to your organization. Please do not hesitate to contact us if we can be of further assistance. We look forward to working with you in the future.

Sincerely,

FUGRO GEOSCIENCES, INC.

Recep Yilmaz

President

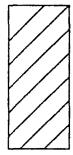
RY/jm

Enclosure: - 1 CD



KEY TO SOIL BEHAVIOR TYPE

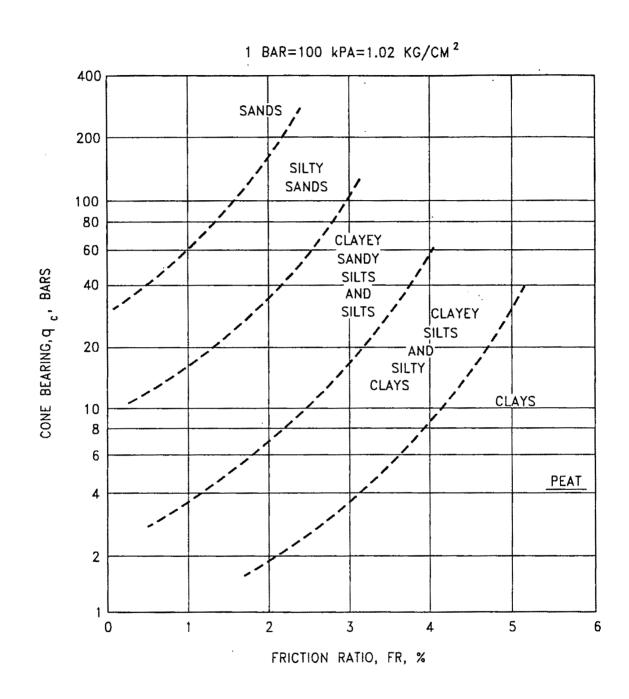
SAND AND SANDY SOIL



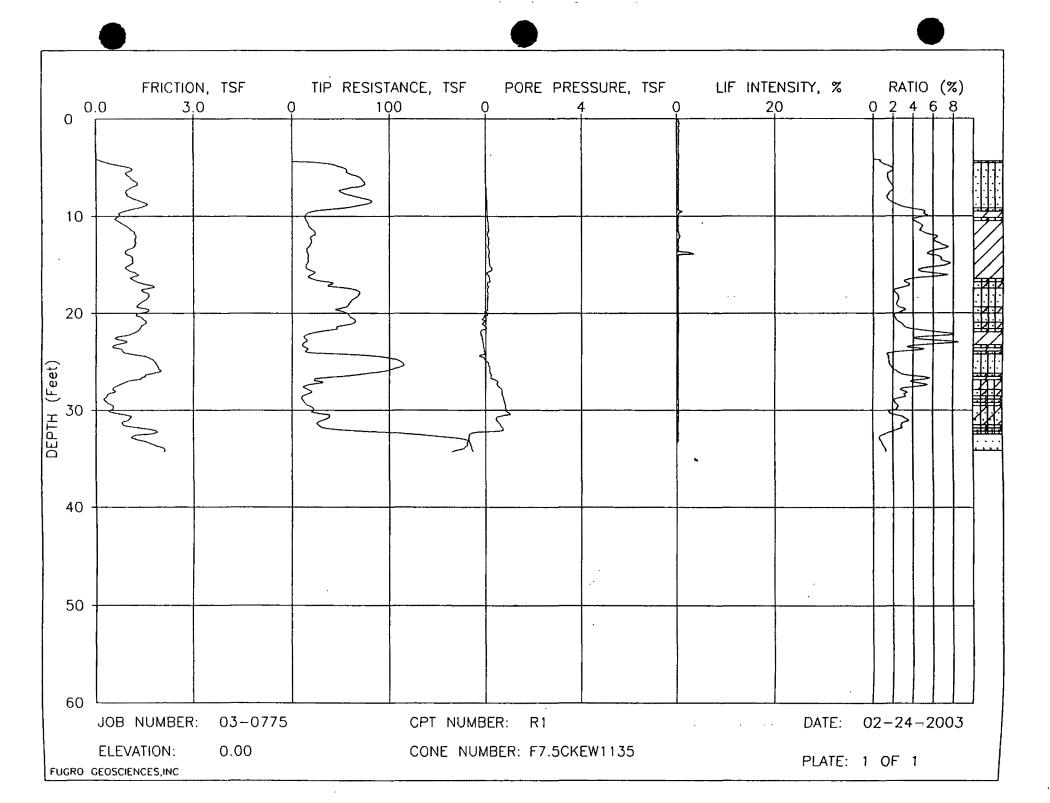
CLAY AND CLAYEY SOIL

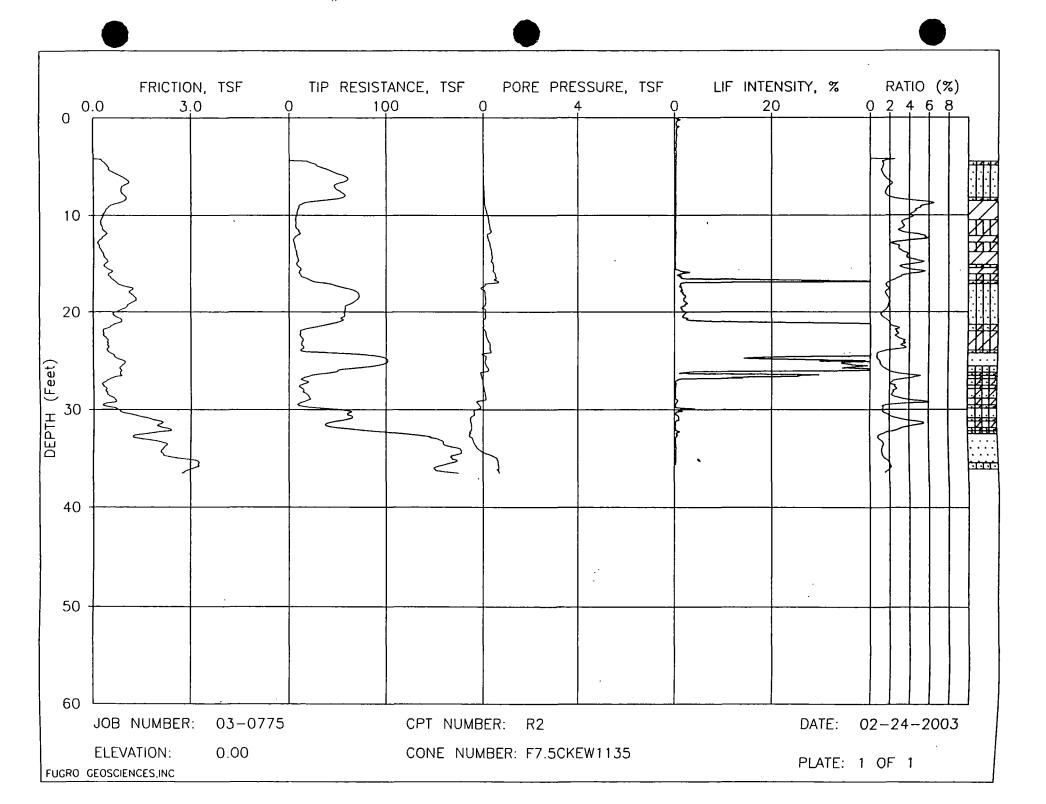


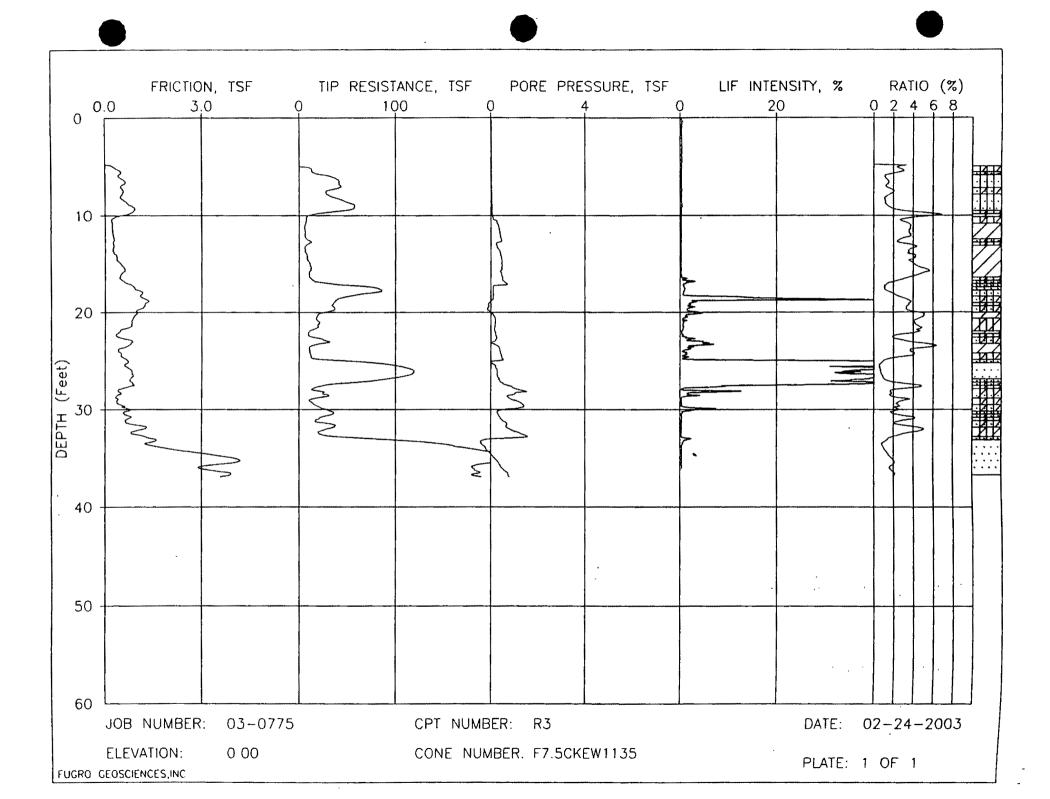
SILT AND SILTY SOIL

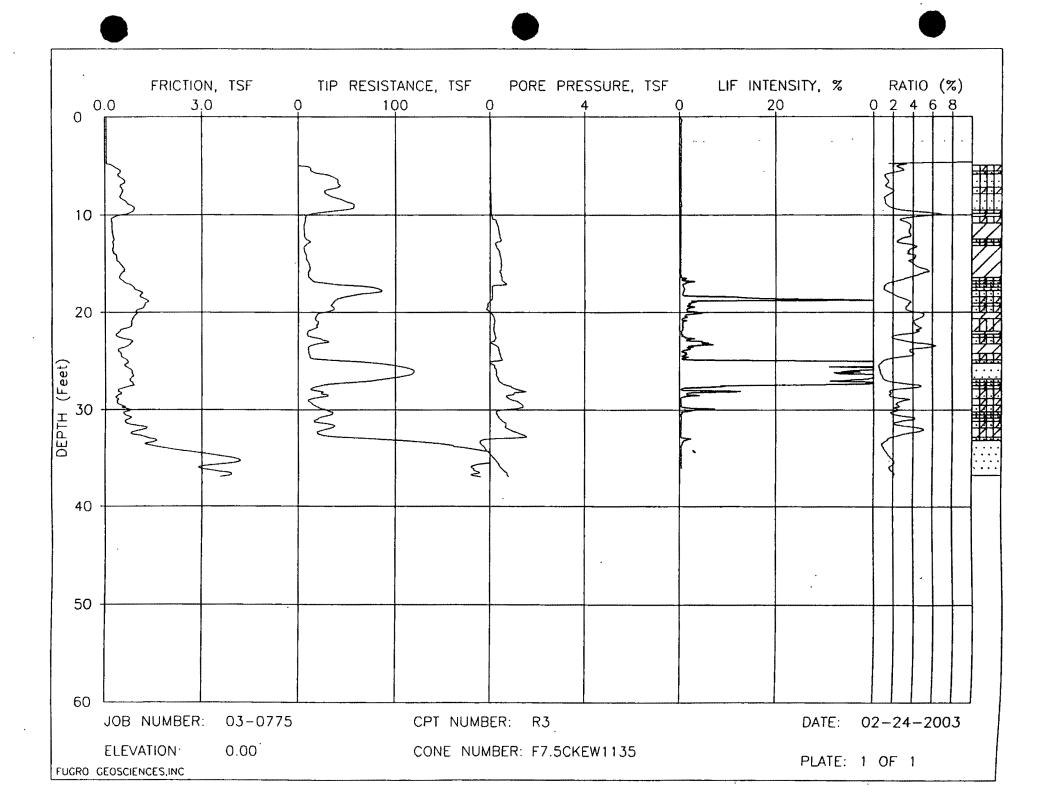


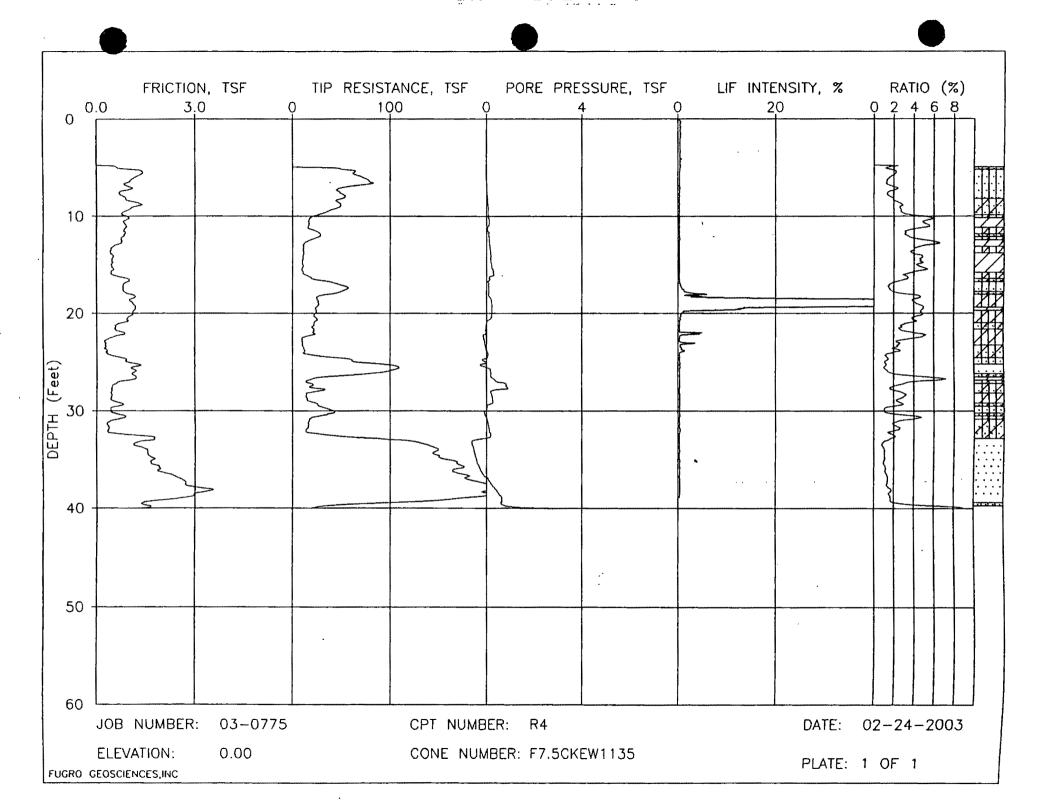
CPT LOGS

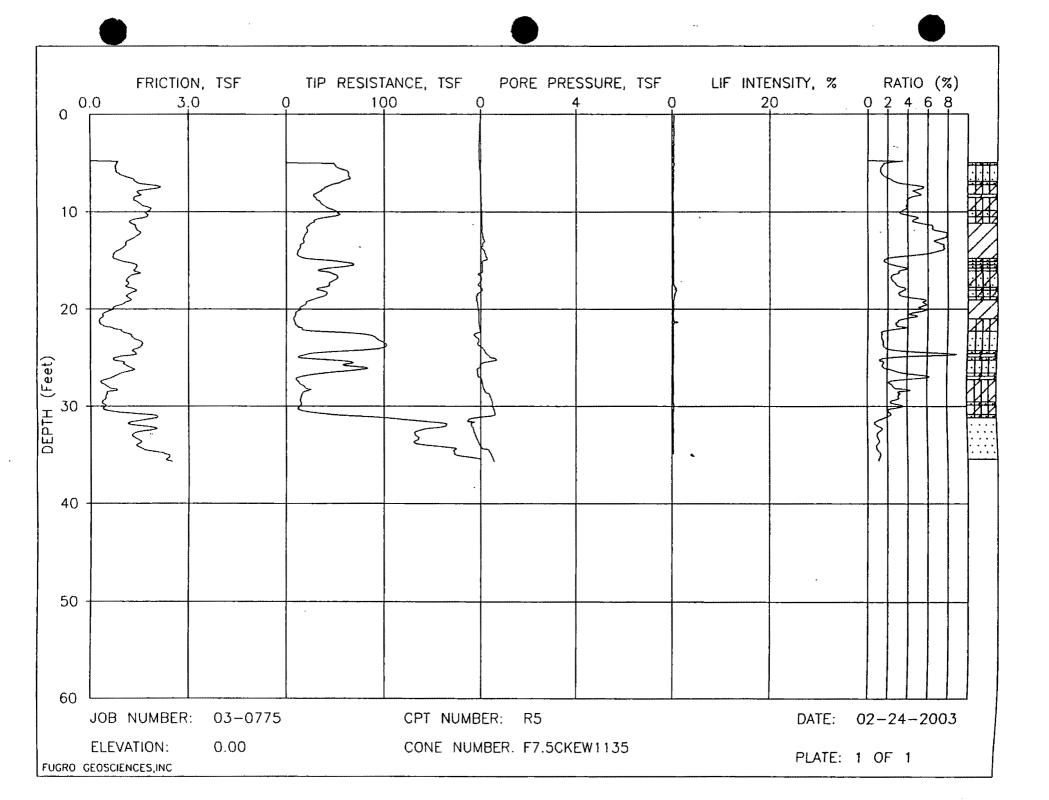


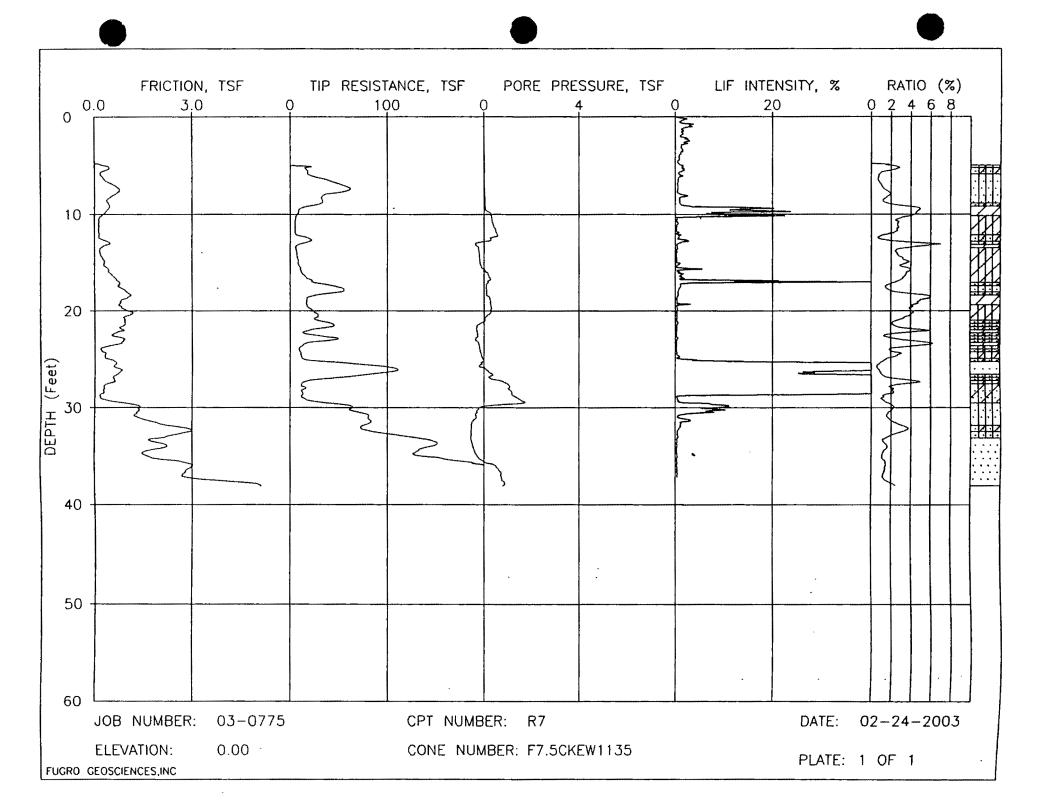


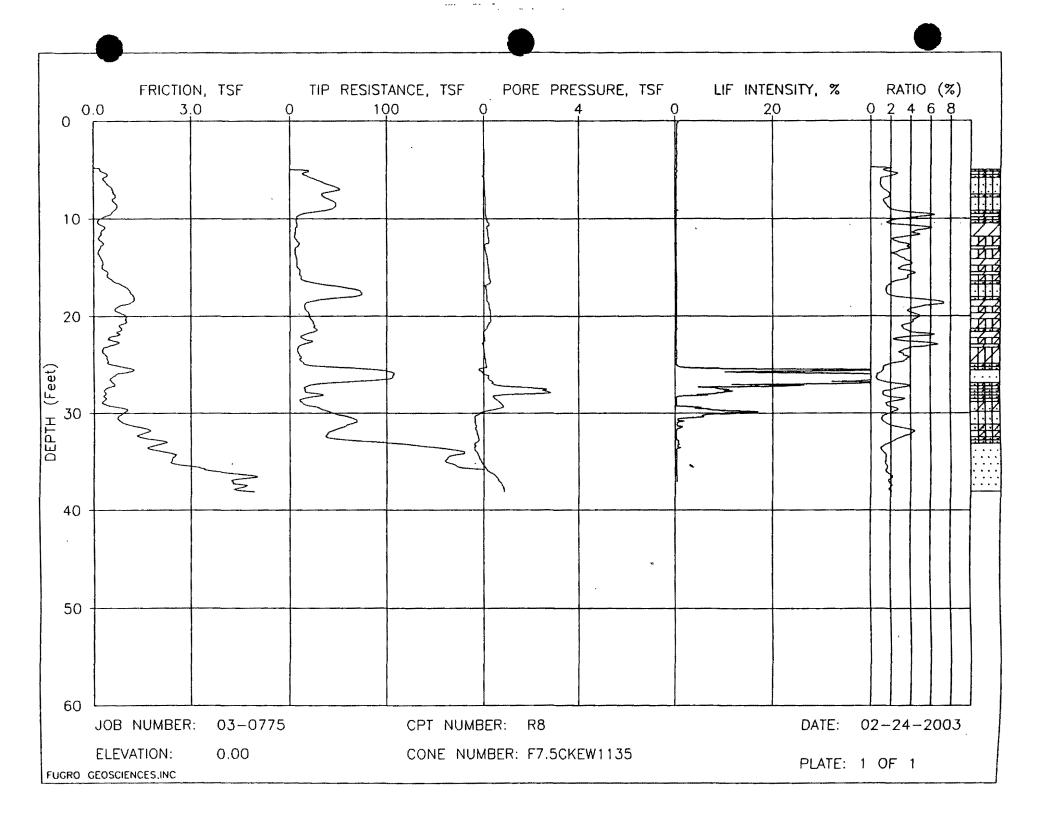


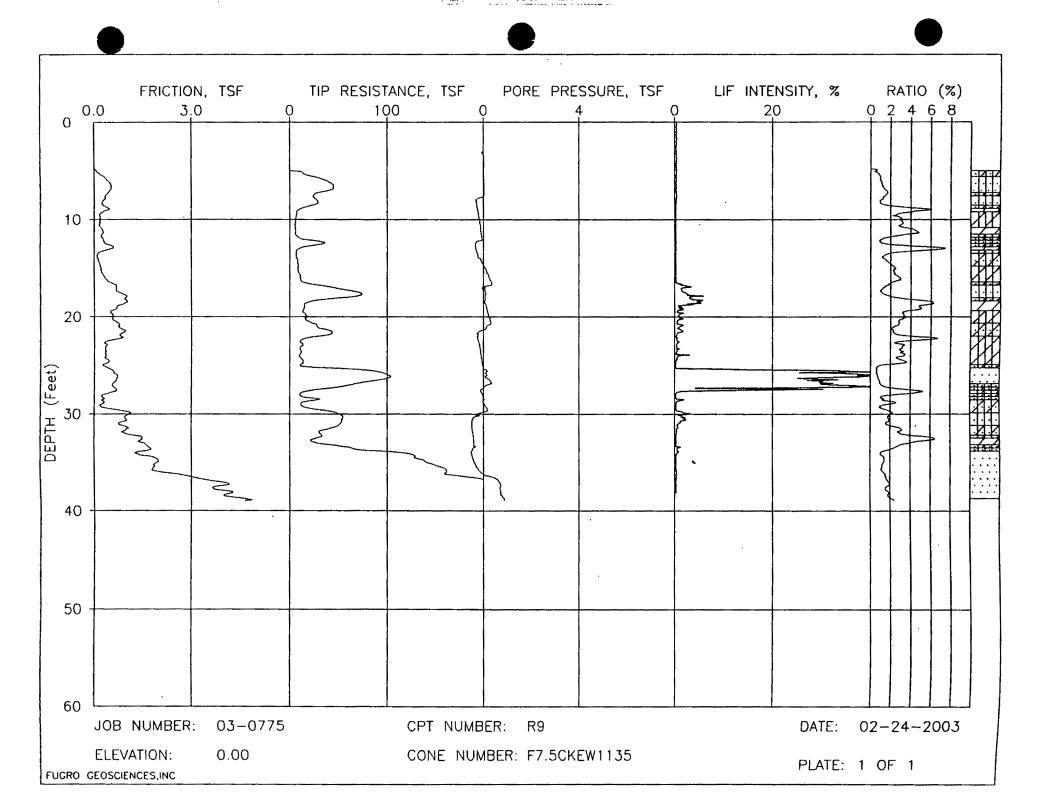


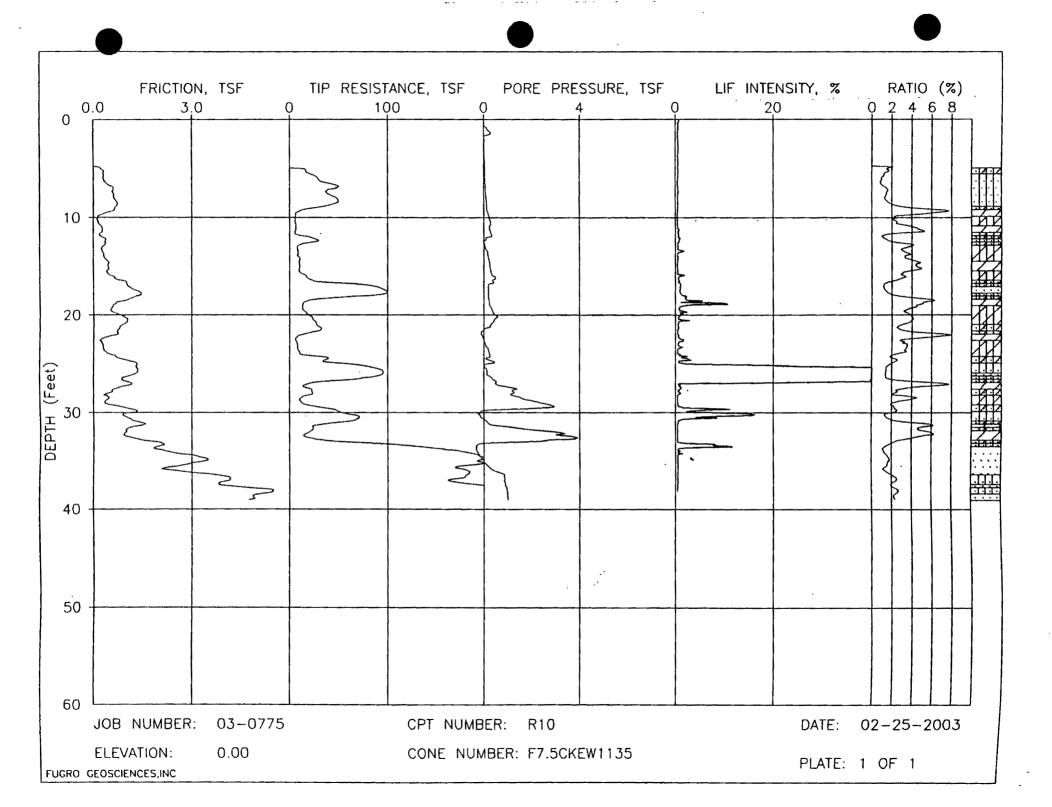


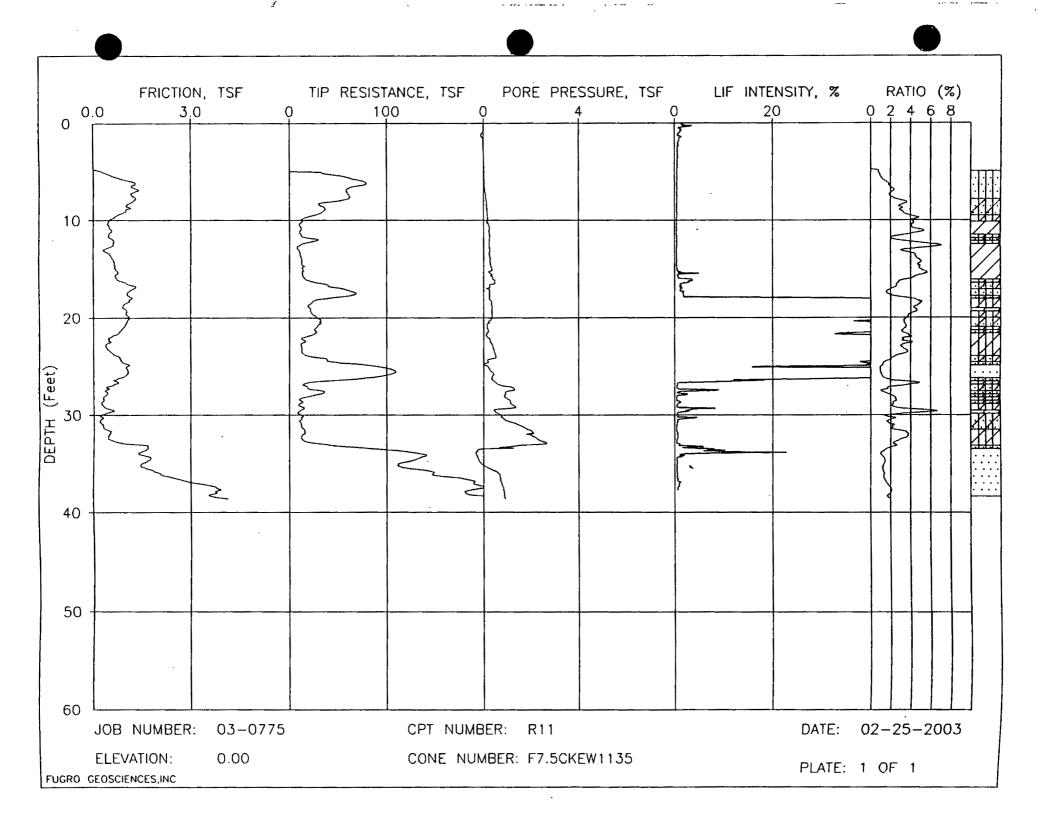


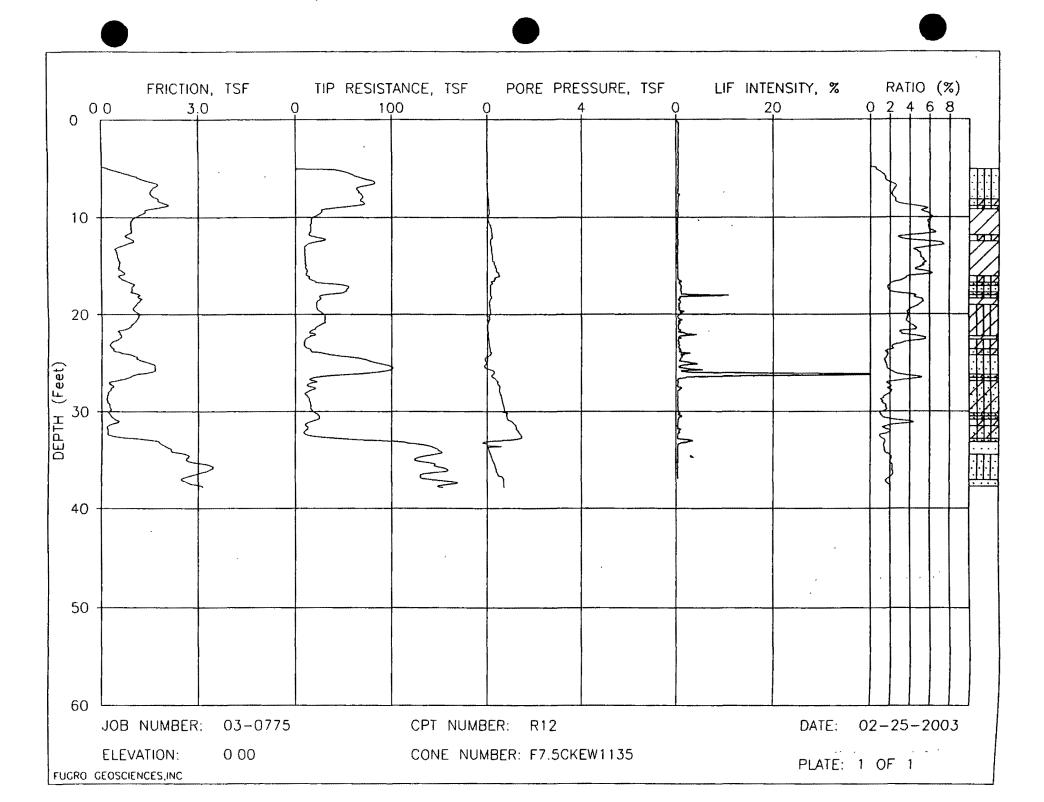


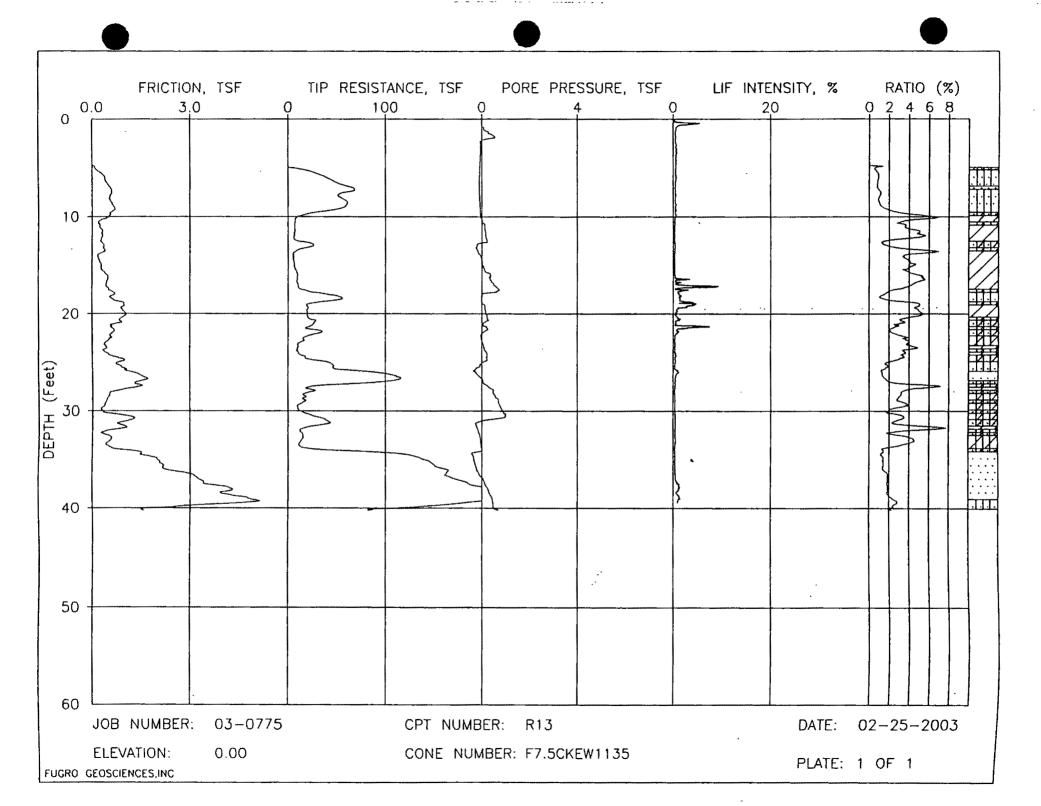


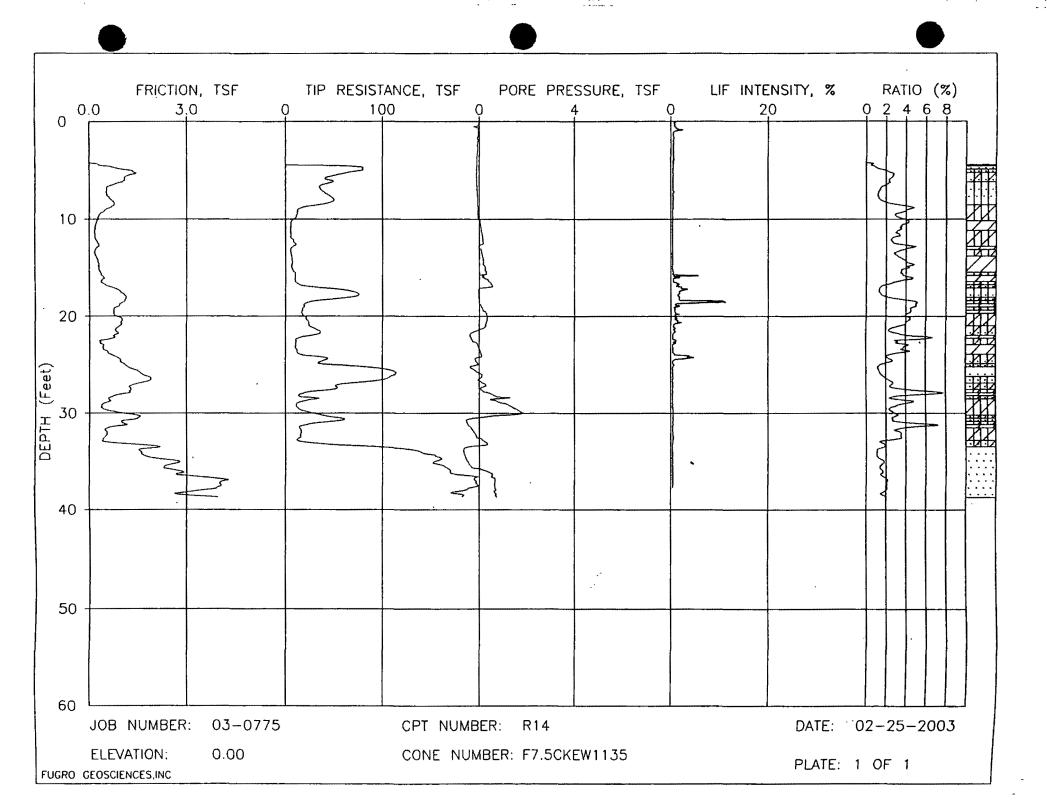


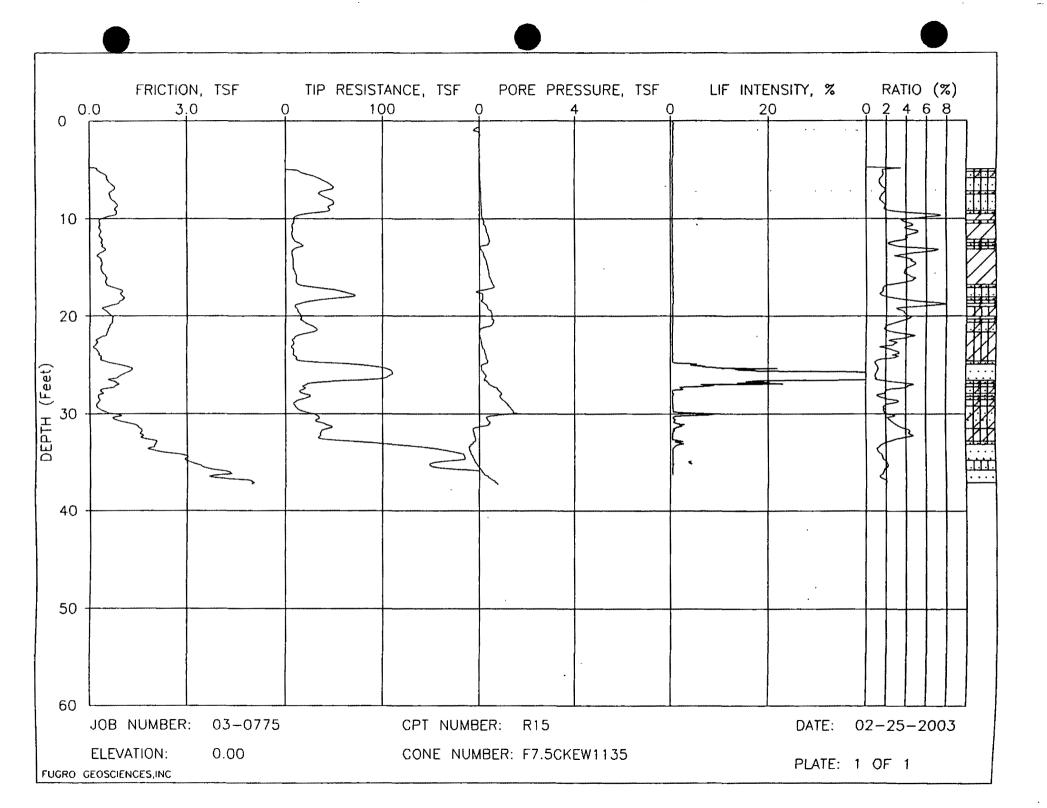


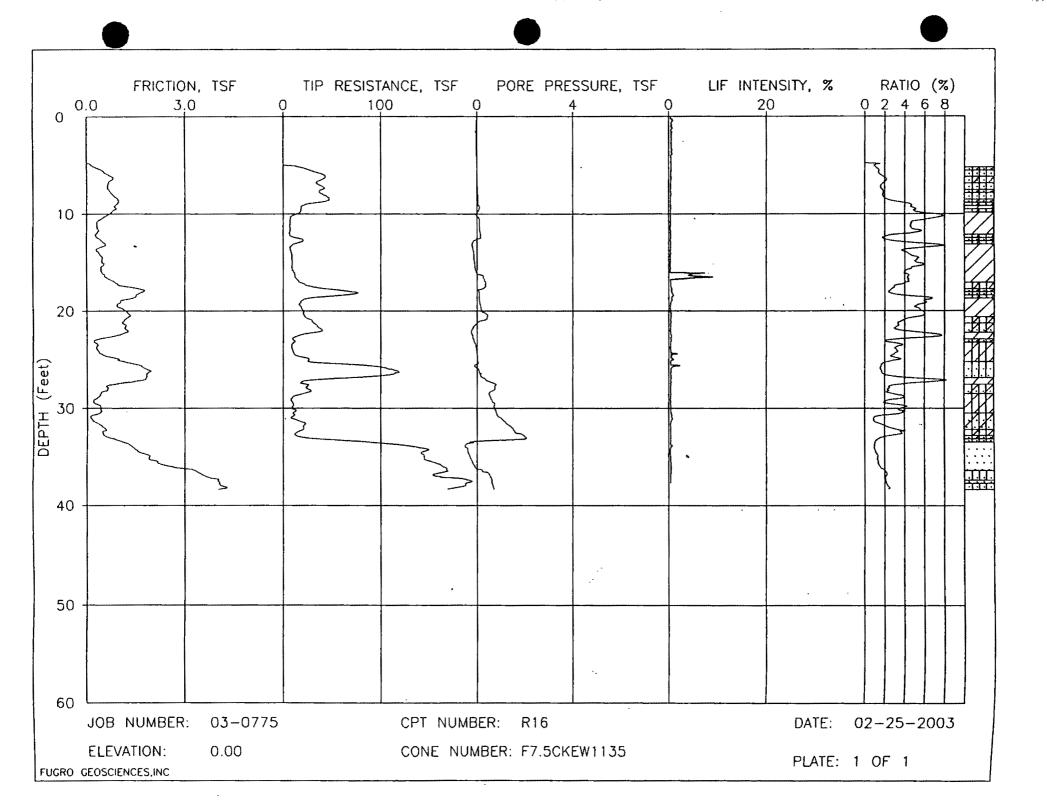


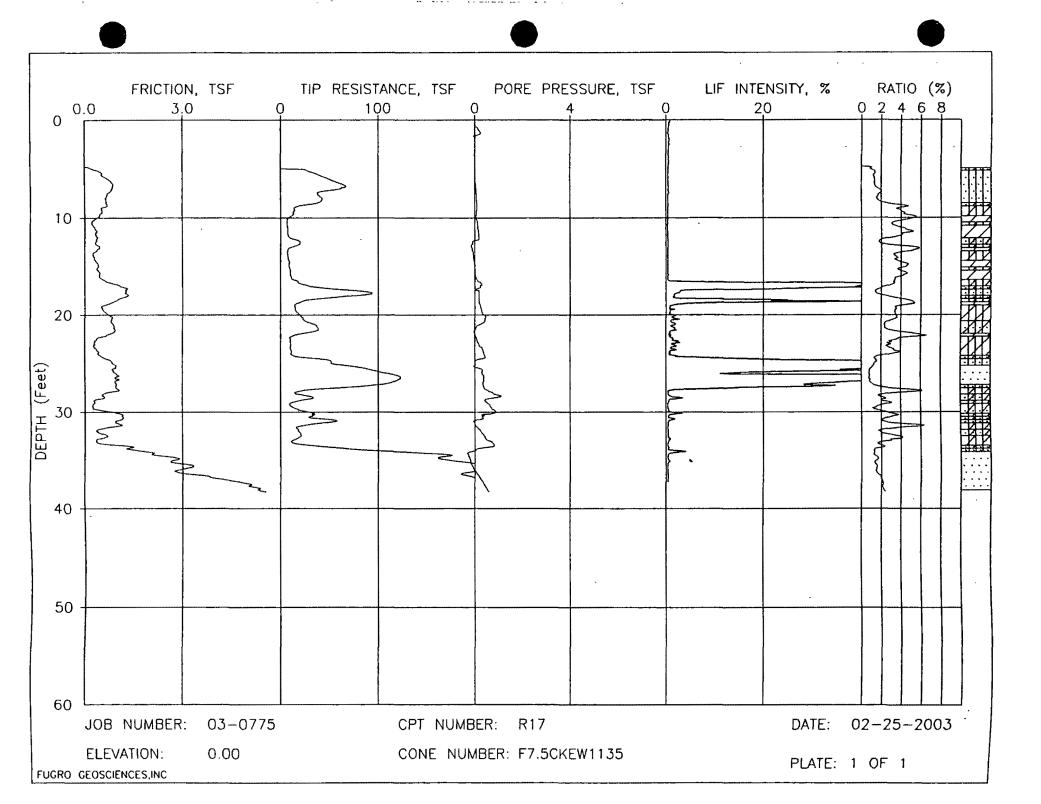












ROST™ LOGS

ROST Fluorescence Response Data

Site: Lynwood, CA

Client: Ninyo & Moore

Date/Time: 02-24-2003 @ 09:16:30

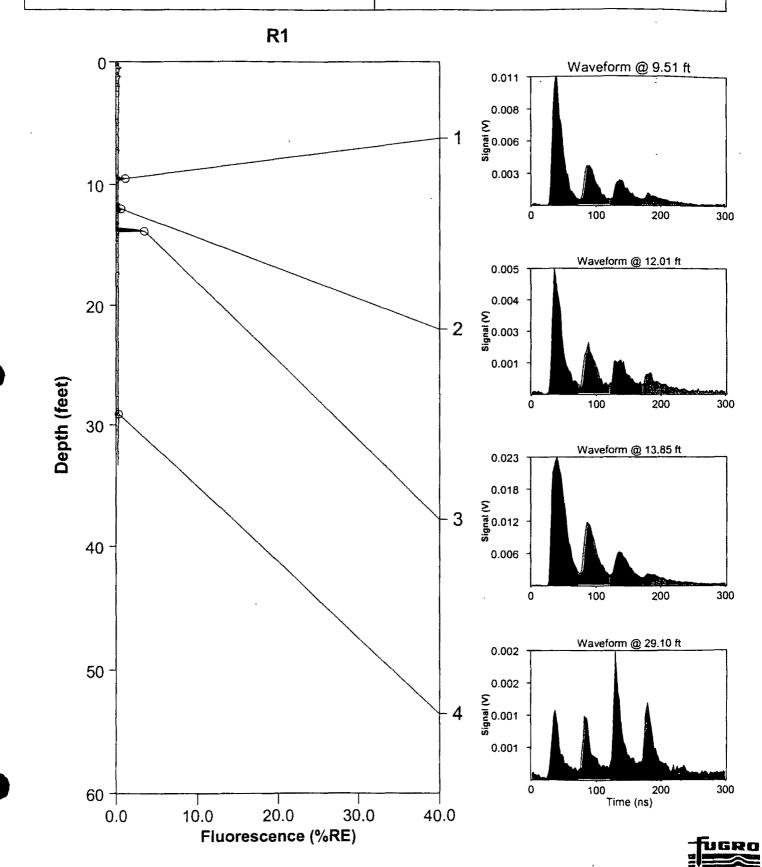
ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 3.46% @ 13.85 ft

Final depth BGS: 33.33 ft



Fugro Geosciences, Inc., 6105 Rookin, Houston, TX 77074

ROST Fluorescence Response Data

Site: Lynwood, CA

Client: Ninyo & Moore

Date/Time: 02-24-2003 @ 11:37:49

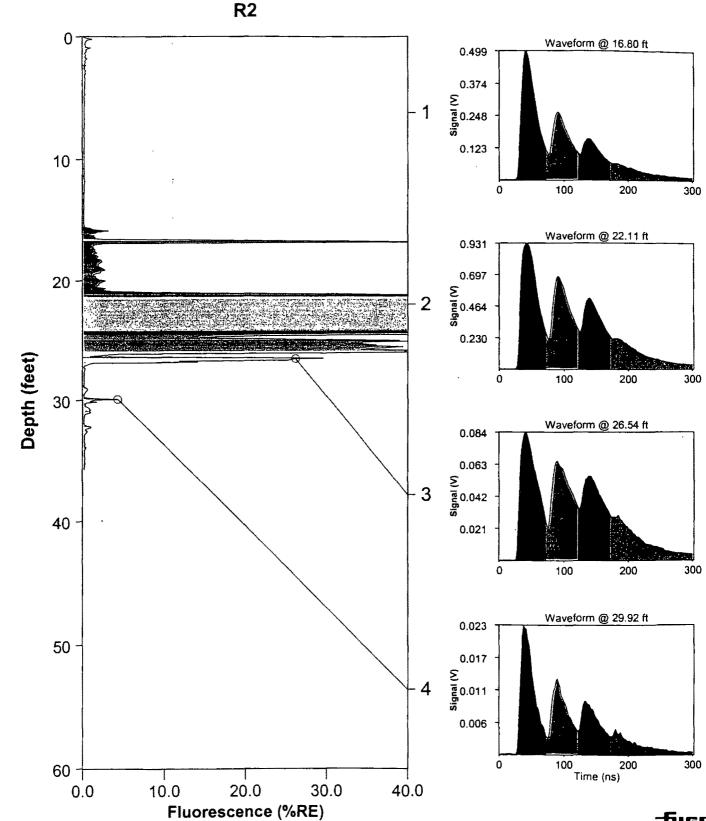
ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 257.26% @ 24.05 ft

Final depth BGS: 35.73 ft



Site: Lynwood, CA

Client: Ninyo & Moore

Date/Time: 02-24-2003 @ .11:37:49

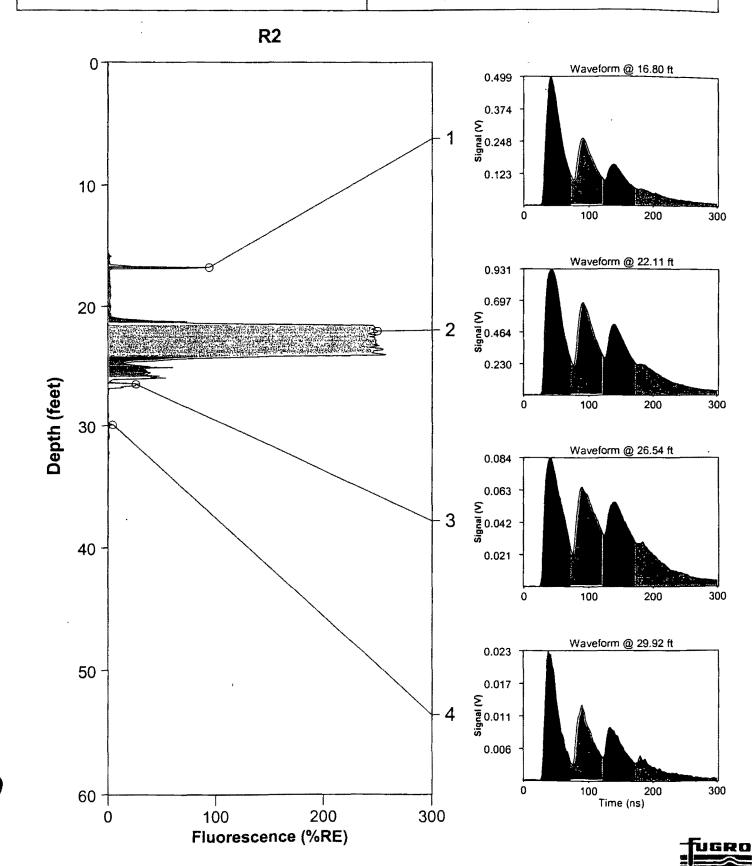
ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 257.26% @ 24.05 ft

Final depth BGS: 35.73 ft



Site: Lynwood, CA

Client: Ninyo & Moore

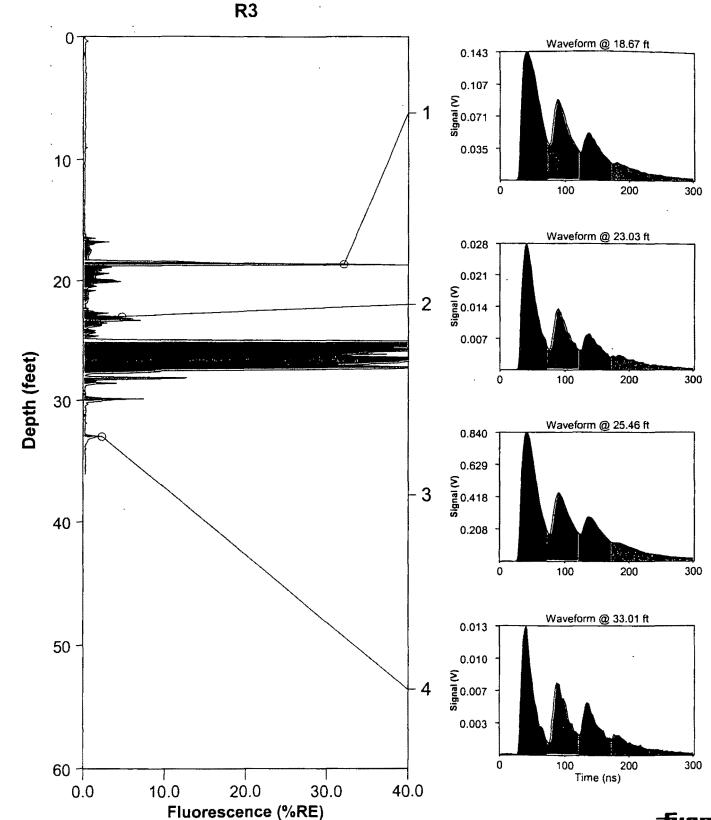
Date/Time: 02-24-2003 @ 12:49:28

ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 206.40% @ 25.33 ft



Site: Lynwood, CA

Client: Ninyo & Moore

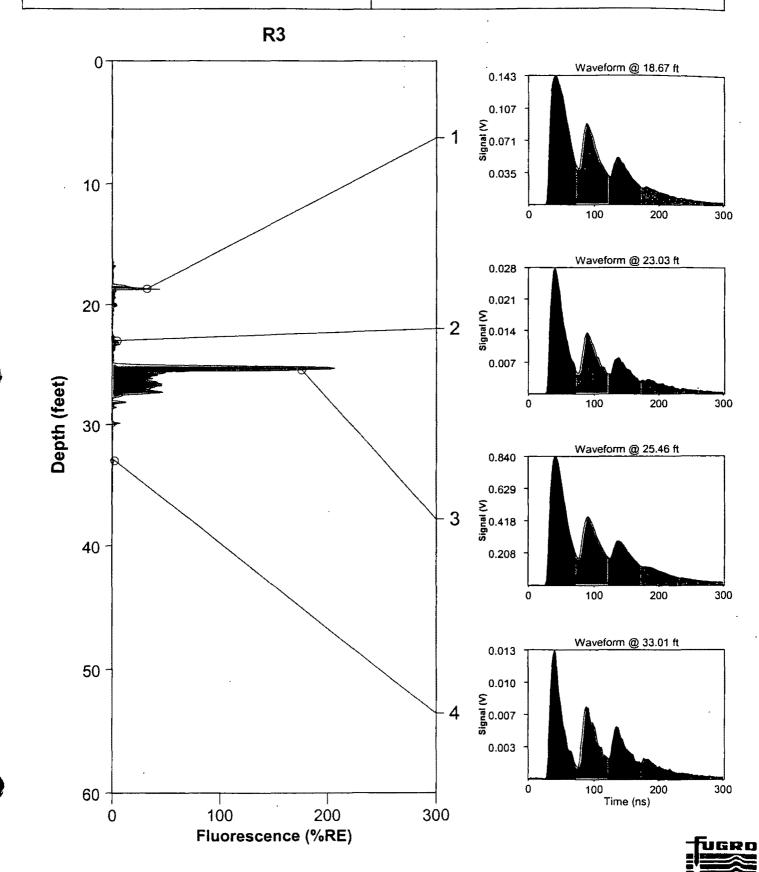
Date/Time: 02-24-2003 @ 12:49:28

ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 206.40% @ 25.33 ft



Site: Lynwood, CA

Client: Ninyo & Moore

Date/Time: 02-24-2003 @ 10:10:17

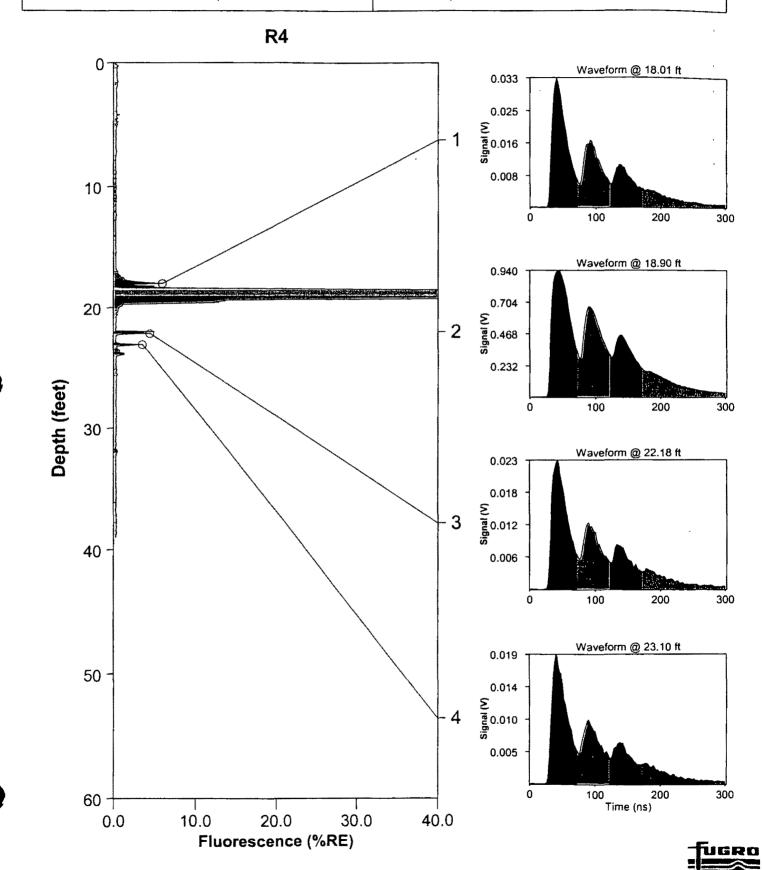
ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 280.55% @ 19.03 ft

Final depth BGS: 39.01 ft



Fugro Geosciences, Inc., 6105 Rookin, Houston, TX 77074

Site: Lynwood, CA

Client: Ninyo & Moore

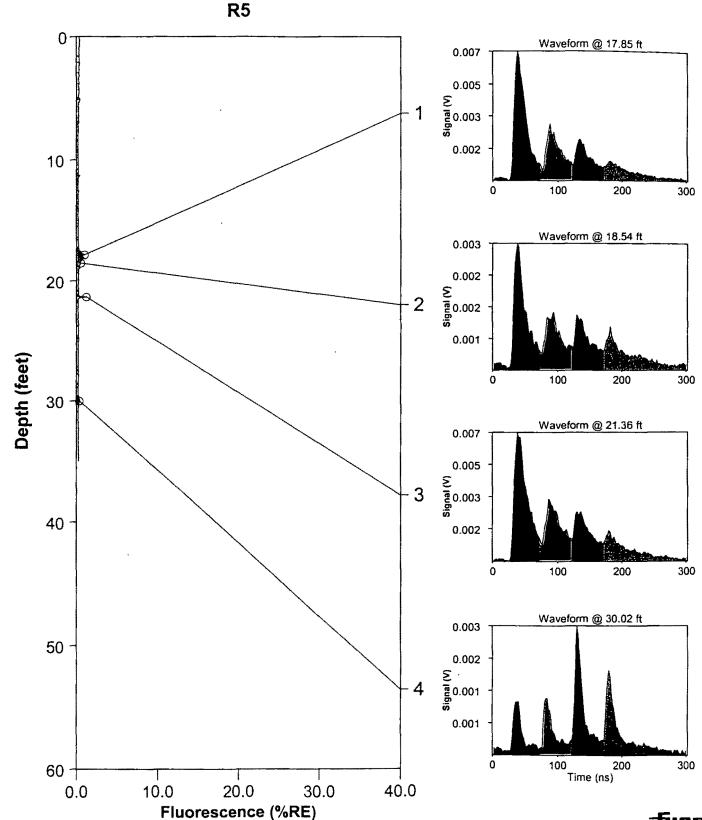
Date/Time: 02-24-2003 @ 10:58:11

ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 1.22% @ 21.36 ft



Site: Lynwood, CA

Client: Ninyo & Moore

Date/Time: 02-24-2003 @ 13:23:05

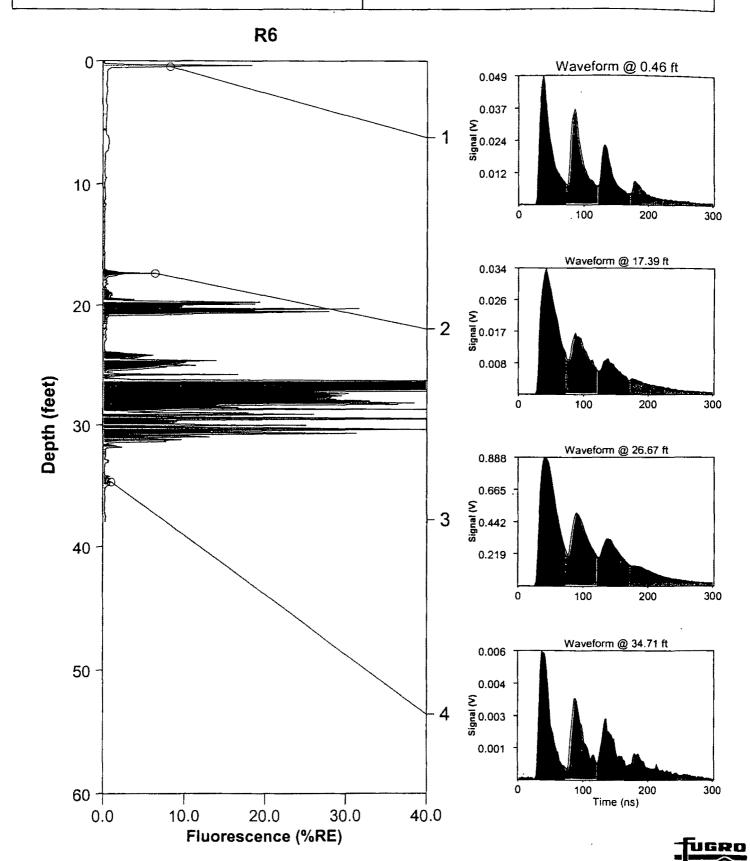
ROST Unit: 1

Operator: D. Deleon

Max fluorescence: 192.93% @ 26.67 ft

Final depth BGS: 37.99 ft

Fugro Job #: 0303-0775



Site: Lynwood, CA

Client: Ninyo & Moore

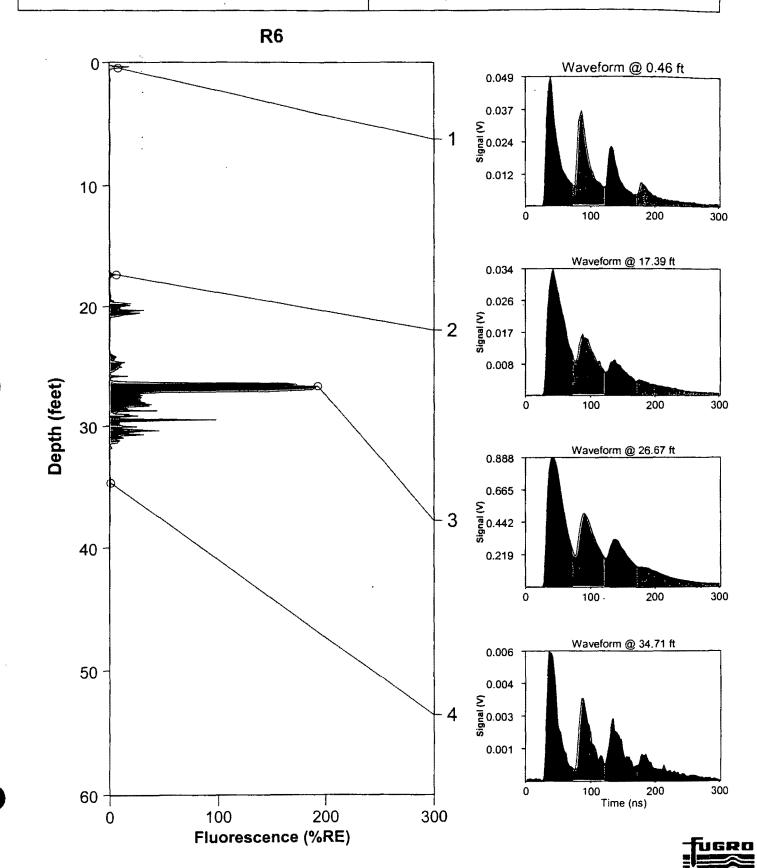
Date/Time: 02-24-2003 @ 13:23:05

ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 192.93% @ 26.67 ft



Site: Lynwood, CA

Client: Ninyo & Moore

Date/Time: 02-24-2003 @ 14:03:15

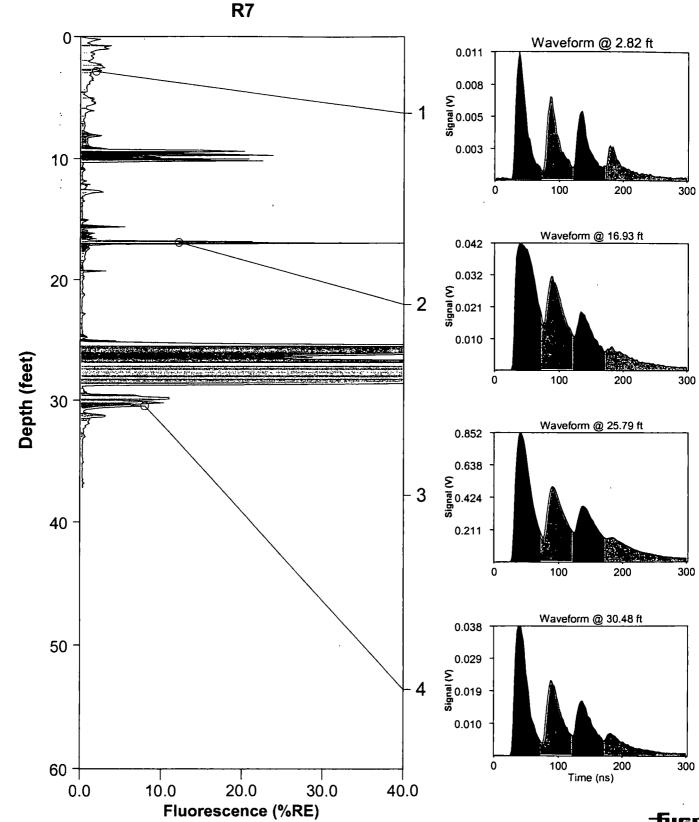
ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 233.49% @ 27.79 ft

Final depth BGS: 37.24 ft



Site: Lynwood, CA

Client: Ninyo & Moore

Date/Time: 02-24-2003 @ 14:03:15

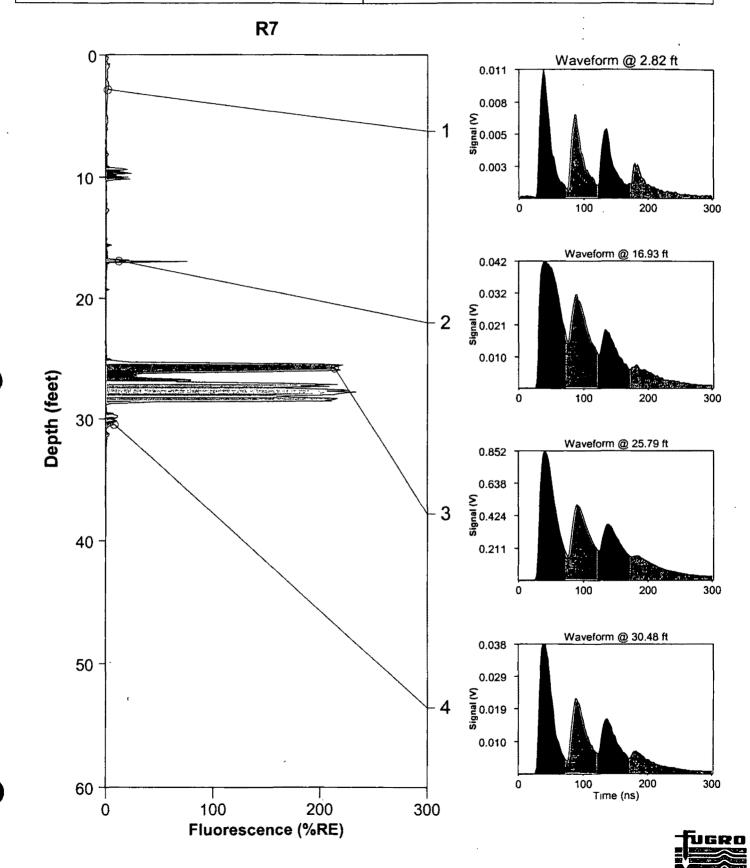
ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 233.49% @ 27.79 ft

Final depth BGS: 37.24 ft



Site: Lynwood, CA

Client: Ninyo & Moore

Date/Time: 02-24-2003 @ 14:44:09

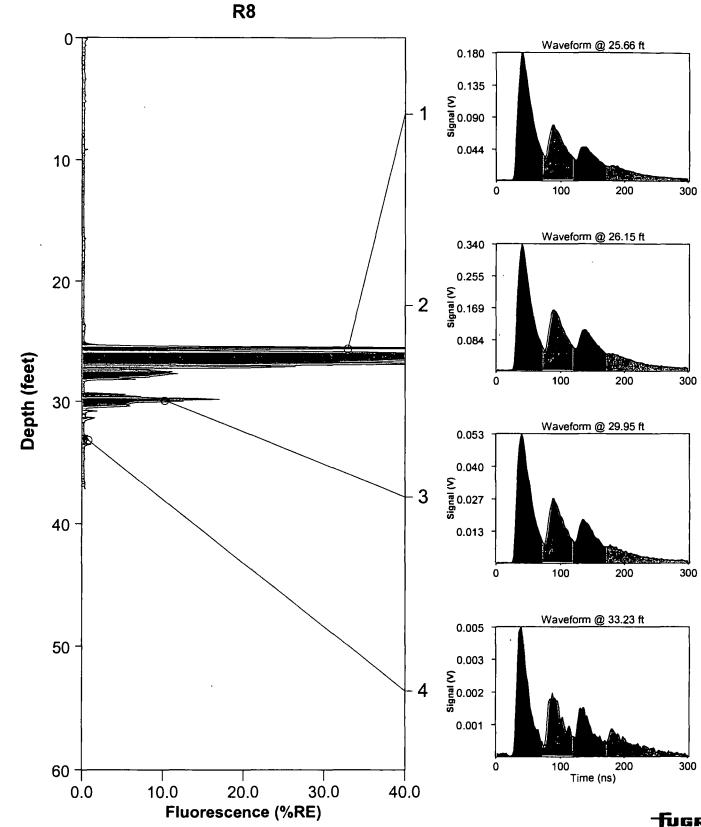
ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 81.29% @ 26.08 ft

Final depth BGS: 37.20 ft



Site: Lynwood, CA

Client: Ninyo & Moore

Date/Time: 02-24-2003 @ 14:44:09

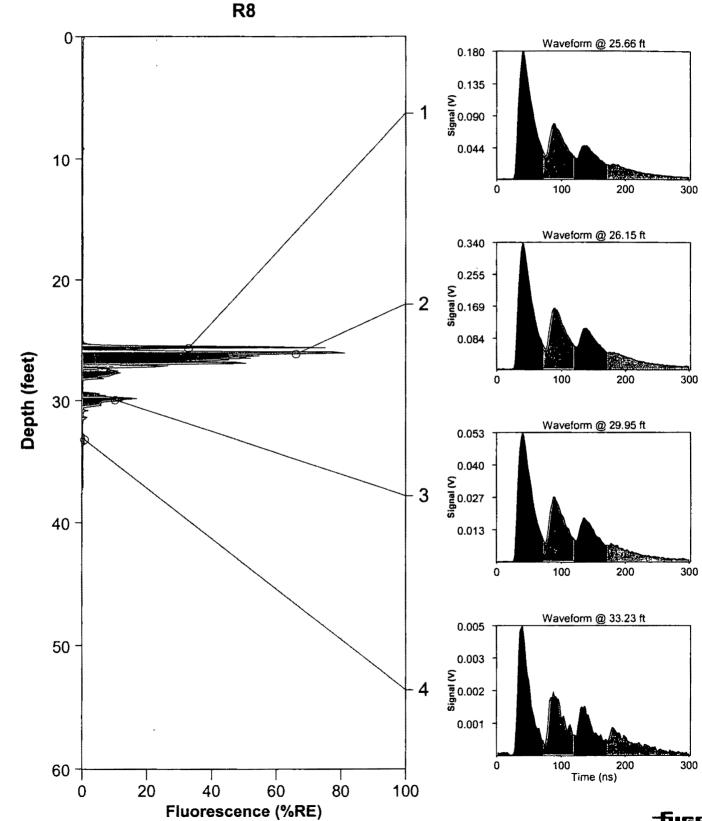
ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 81.29% @ 26.08 ft

Final depth BGS: 37.20 ft



Site: Lynwood, CA

Client: Ninyo & Moore

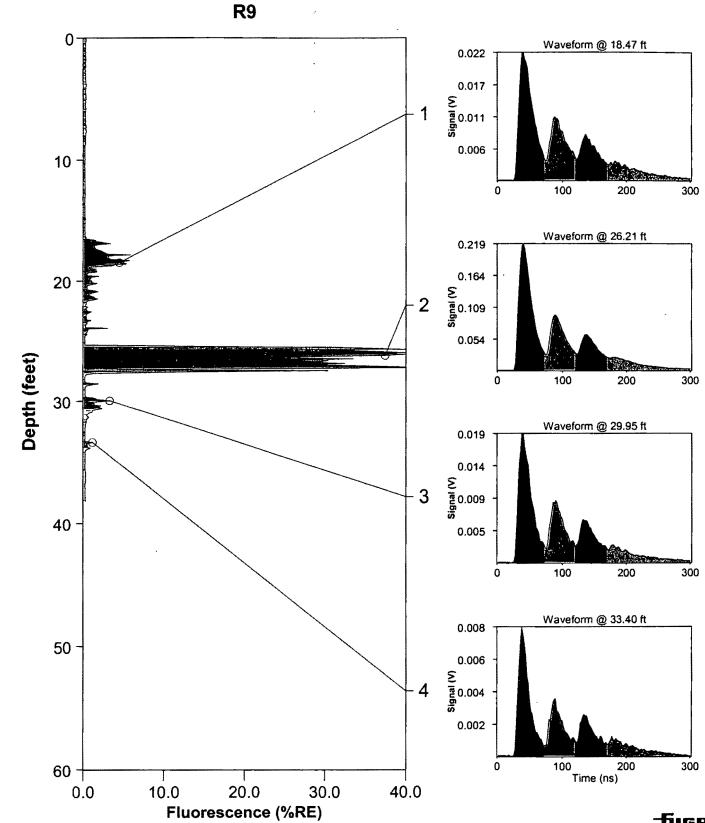
Date/Time: 02-24-2003 @ 15:19:43

ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 61.82% @ 27.23 ft



Site: Lynwood, CA

Client: Ninyo & Moore

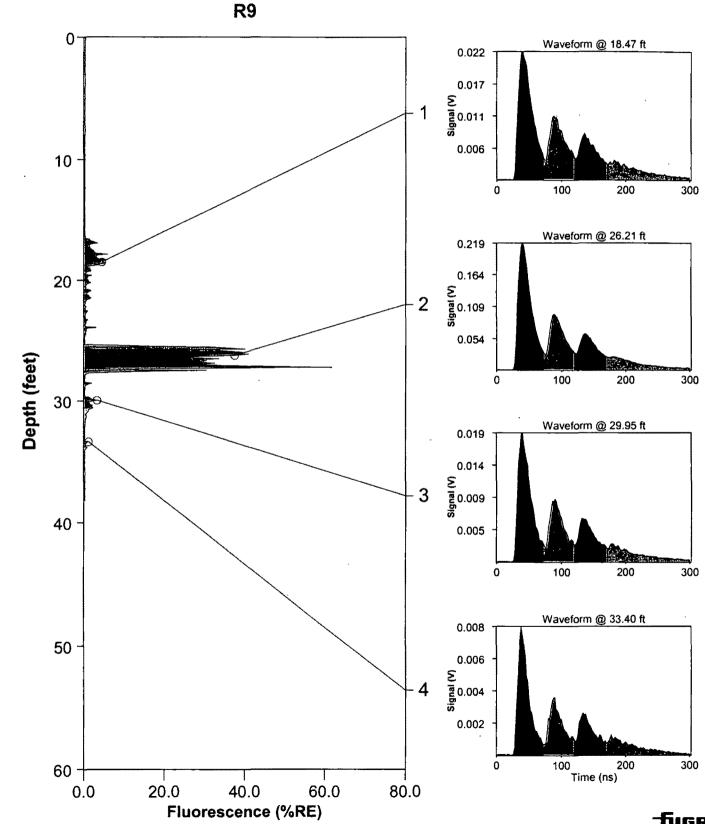
Date/Time: 02-24-2003 @ 15:19:43

ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 61.82% @ 27.23 ft



Site: Lynwood, CA

Client: Ninyo & Moore

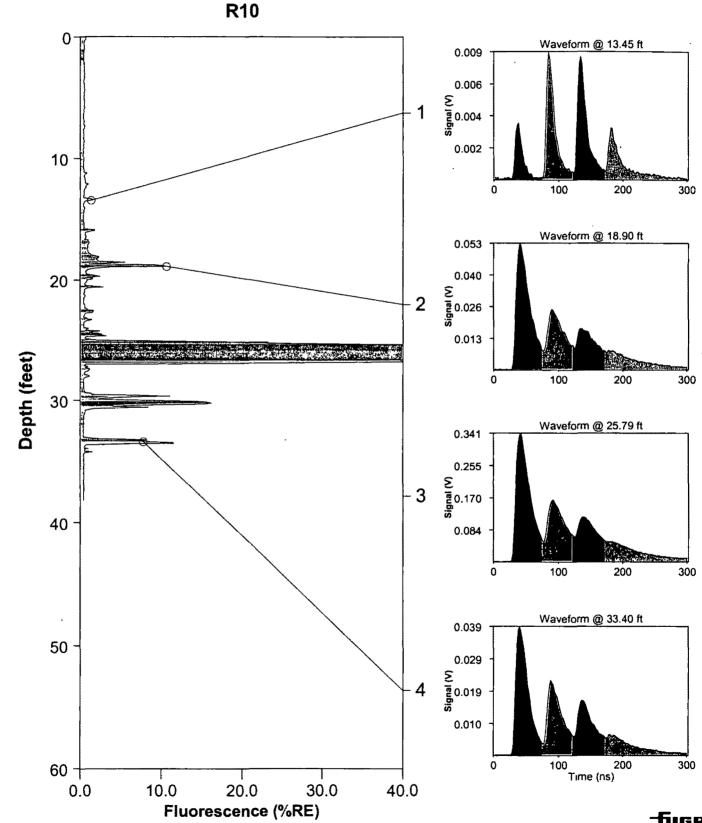
Date/Time: 02-25-2003 @ 09:47:03

ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 92.53% @ 25.56 ft



Site: Lynwood, CA

Client: Ninyo & Moore

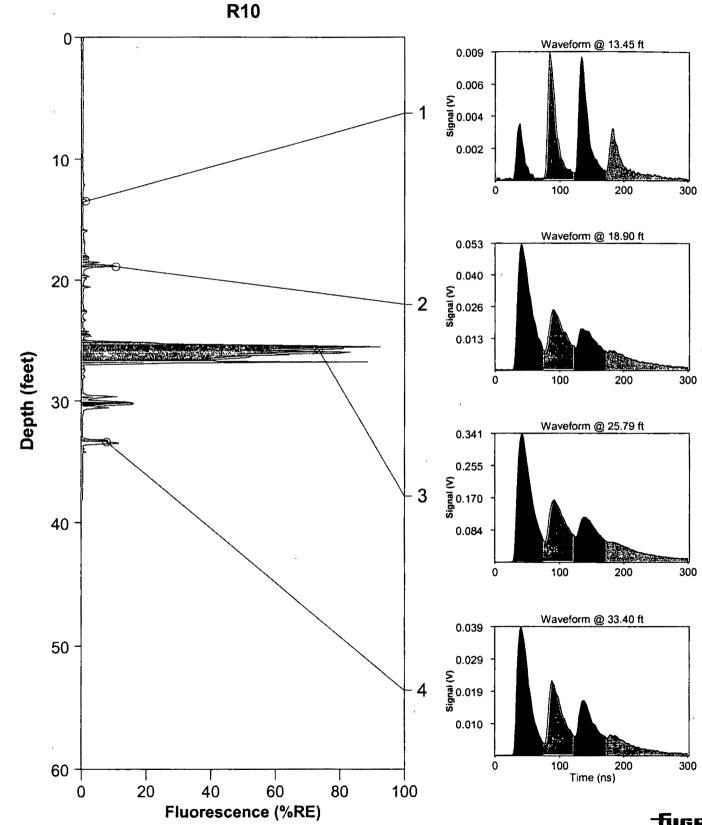
Date/Time: 02-25-2003 @ 09:47:03

ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 92.53% @ 25.56 ft



Site: Lynwood, CA

Client: Ninyo & Moore

Date/Time: 02-25-2003 @ 11:40:18

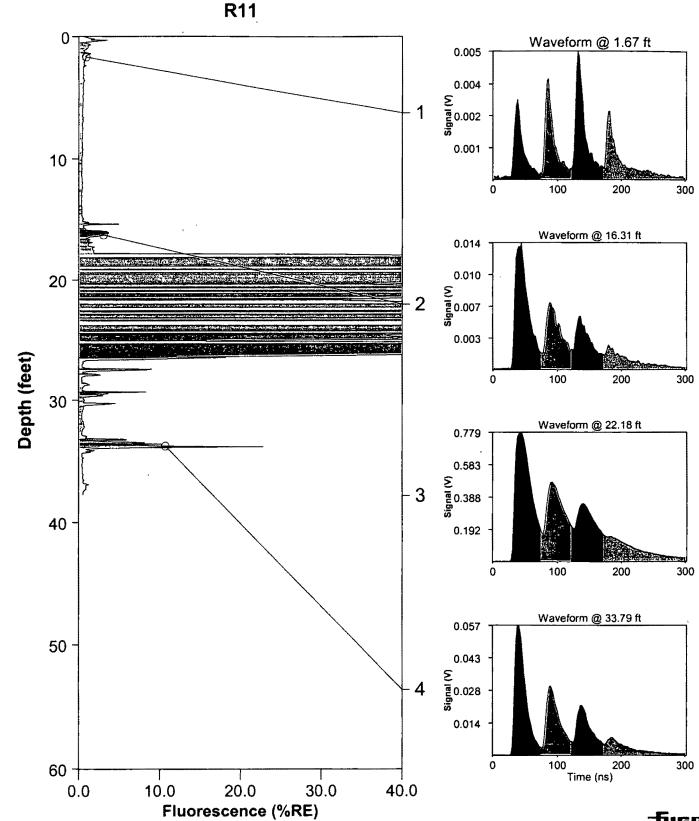
ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 290.46% @ 23.06 ft

Final depth BGS: 37.76 ft



Site: Lynwood, CA

Client: Ninyo & Moore

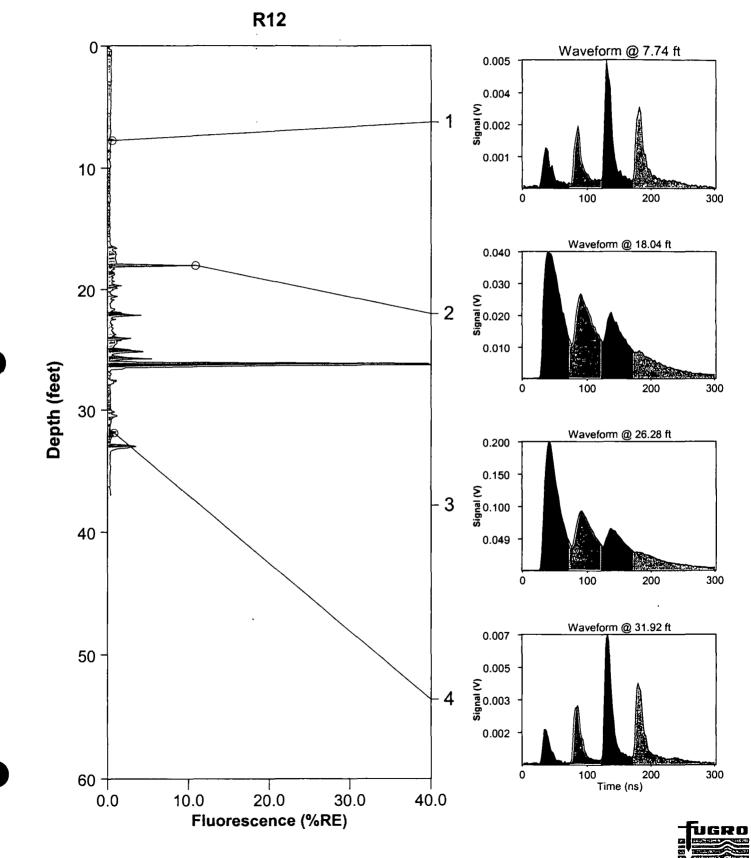
Date/Time: 02-25-2003 @ 15:27:16

ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 40.52% @ 26.25 ft



Site: Lynwood, CA

Client: Ninyo & Moore

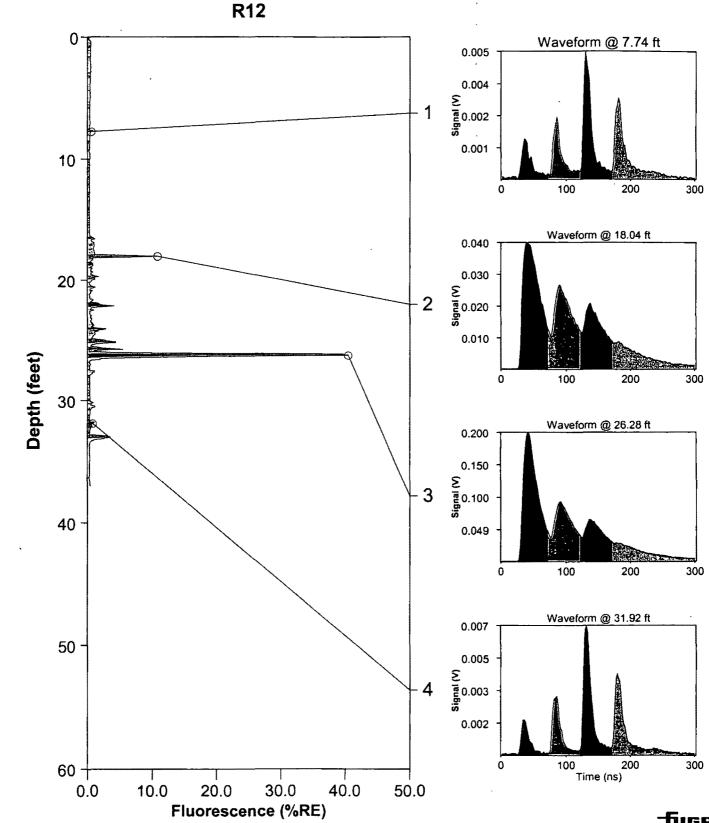
Date/Time: 02-25-2003 @ 15:27:16

ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 40.52% @ 26.25 ft



Site: Lynwood, CA

Client: Ninyo & Moore

Date/Time: 02-25-2003 @ 14:50:36

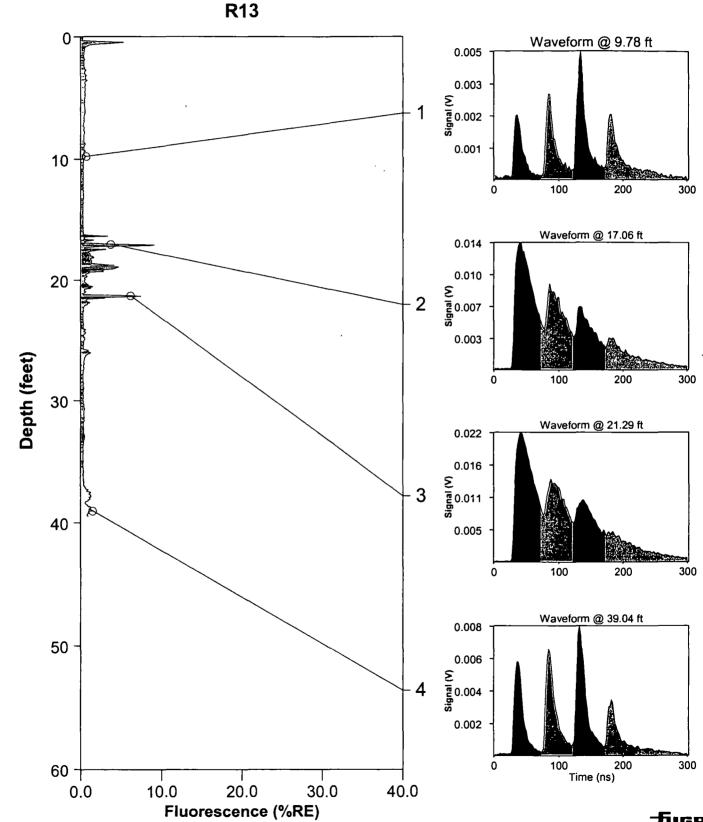
ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 9.11% @ 17.13 ft

Final depth BGS: 39.50 ft



Site: Lynwood, CA

Client: Ninyo & Moore

Date/Time: 02-25-2003 @ 12:14:43

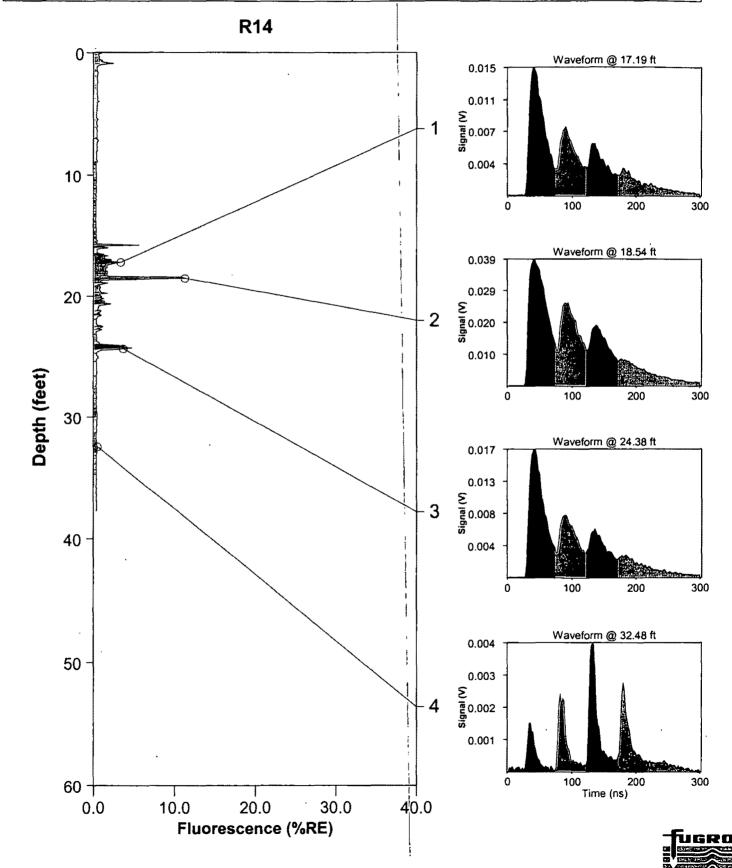
ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 11.29% @ 18.54 ft

Final depth BGS: 37.76 ft



Site: Lynwood, CA

Client: Ninyo & Moore

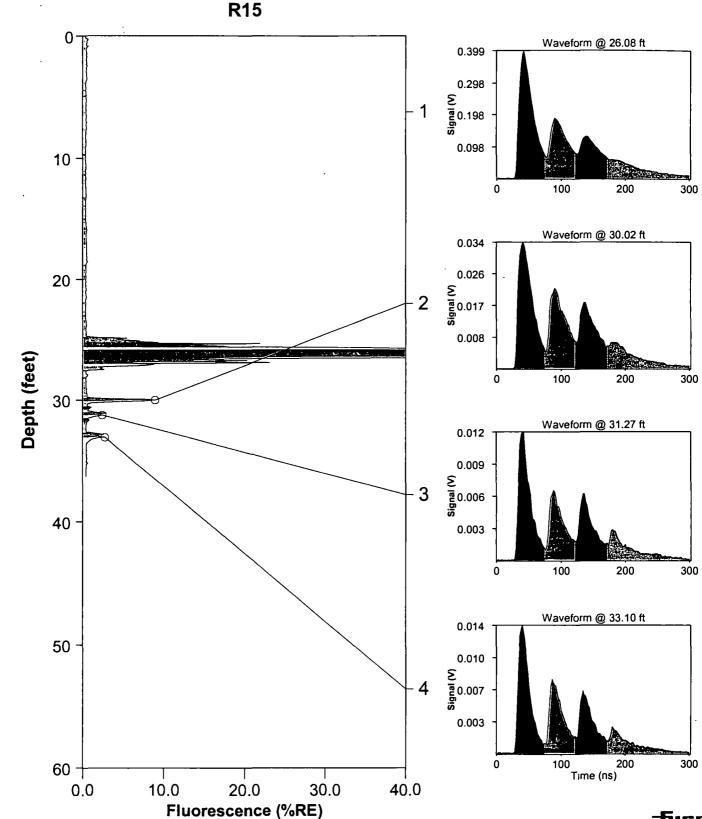
Date/Time: 02-25-2003 @ 10:21:23

ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 103.75% @ 25.85 ft



Site: Lynwood, CA

Client: Ninyo & Moore

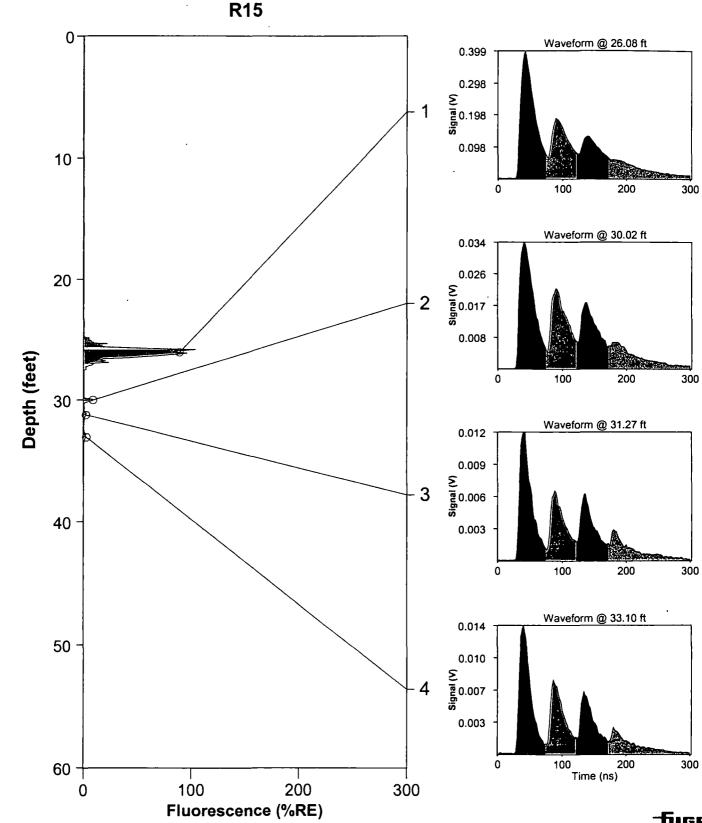
Date/Time: 02-25-2003 @ 10:21:23

ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 103.75% @ 25.85 ft



Site: Lynwood, CA

Client: Ninyo & Moore

Date/Time: 02-25-2003 @ 14:10:56

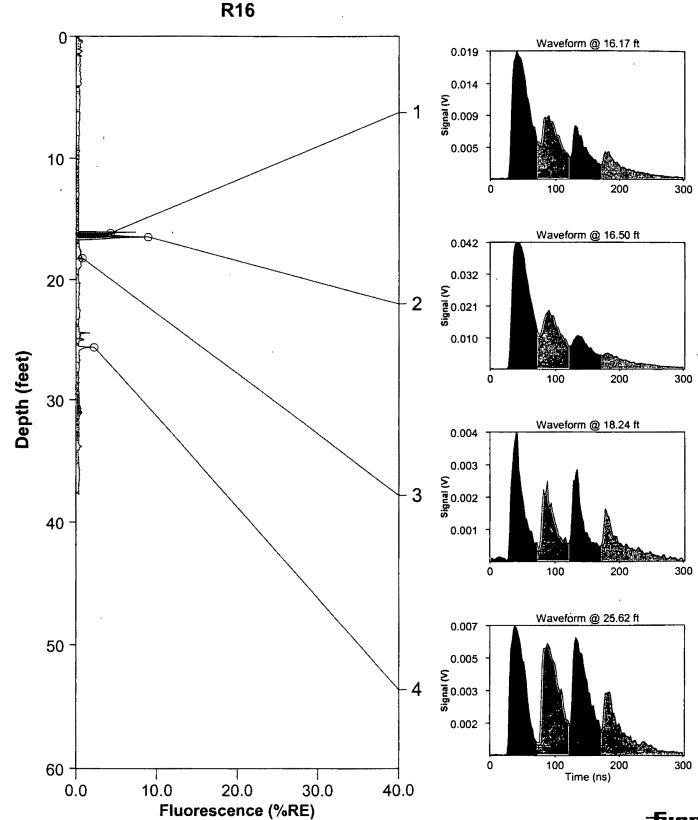
ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 8.93% @ 16.50 ft

Final depth BGS: 37.80 ft



Site: Lynwood, CA

Client: Ninyo & Moore

Date/Time: 02-25-2003 @ 13:28:56

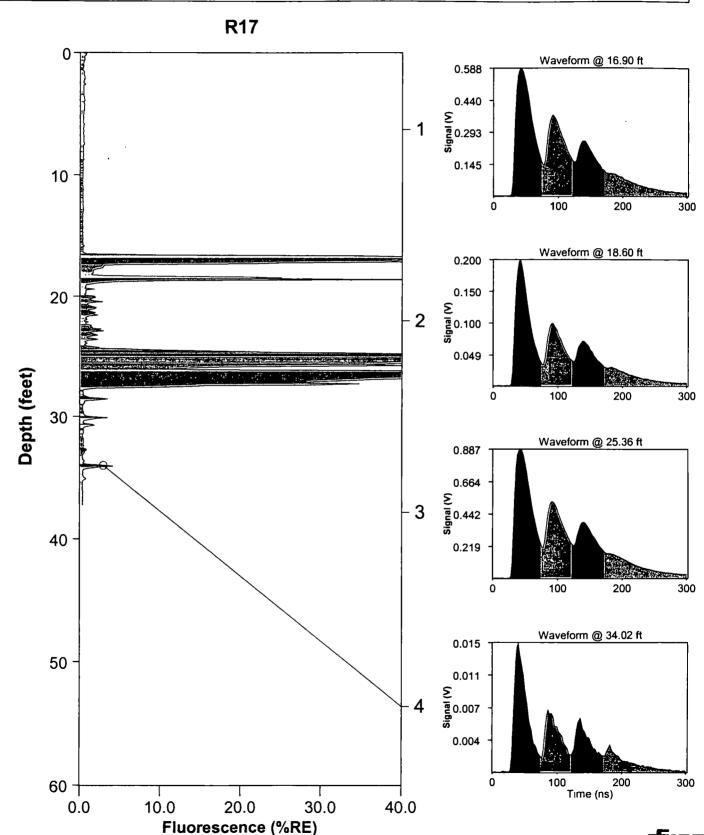
ROST Unit: 1

Operator: D. Deleon

Fugro Job #: 0303-0775

Max fluorescence: 247.90% @ 25.36 ft

Final depth BGS: 37.27 ft



Site: Lynwood, CA

Client: Ninyo & Moore

Date/Time: 02-25-2003 @ 13:28:56

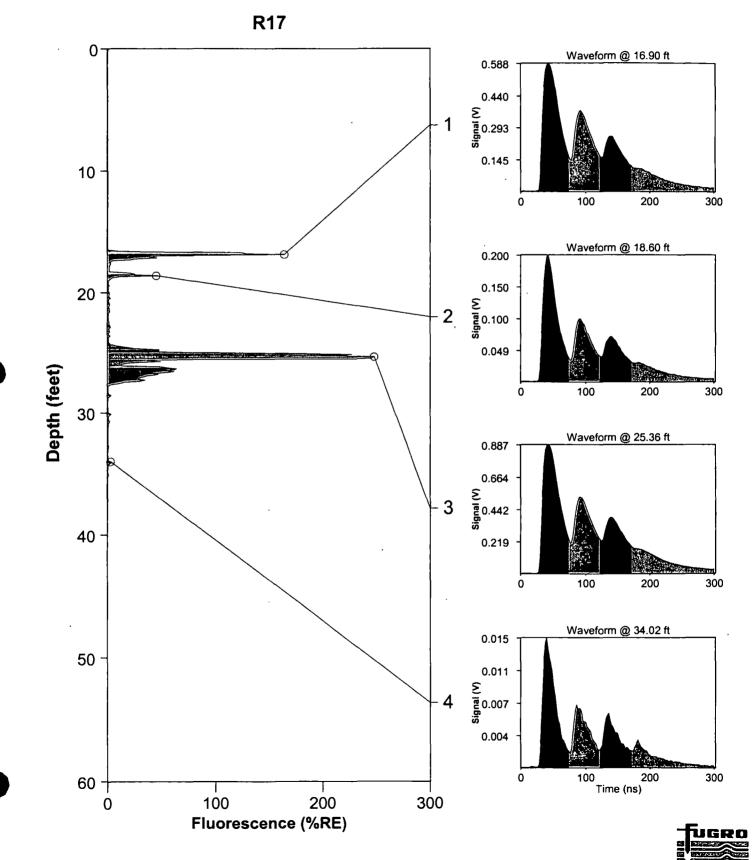
ROST Unit: 1

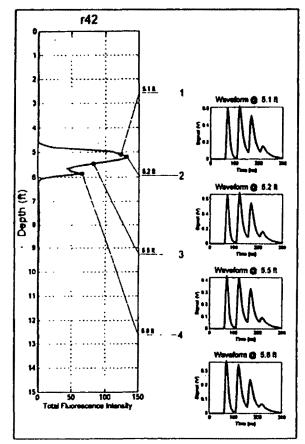
Operator: D. Deleon

Fugro Job #: 0303-0775

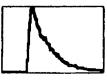
Max fluorescence: 247.90% @ 25.36 ft

Final depth BGS: 37.27 ft

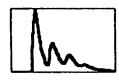




Example Product Waveforms



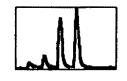
Jet Fuel



Gasoline



Diesel



Coal Tar/Creosote

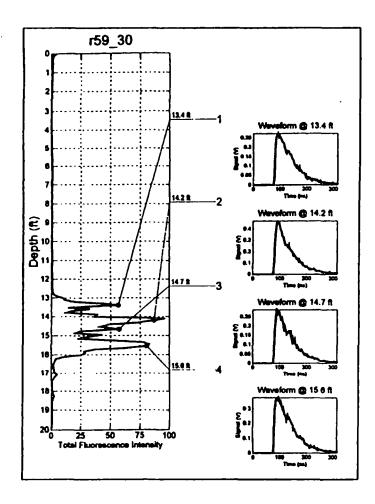
ROSTTM Fluorescence vs Depth/ Waveform Log

The graph on the left portion of the log presents the distribution of petroleum hydrocarbons (PHCs) continuously with depth a function as fluorescence intensity. Fluorescence intensity is generally proportional to the PHC concentration in the soil. The particular spectral signature of the encountered PHC can be viewed at any depth of the ROST™ test and is illustrated on the right portion of the log.

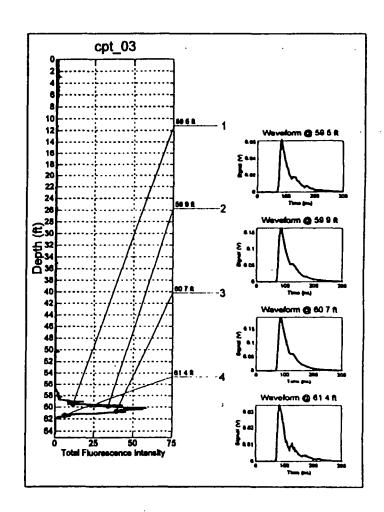
Four peaks are presented on each waveform, and represent, from left to right, fluorescence intensity at each of the four monitored measured wavelengths: 340, 390, 440, and 490 nm.

The shape of the waveform can be compared with those from common petroleum products to identify differentiate encountered hydrocarbon and products.

ROST™ Jet Fuel Waveforms



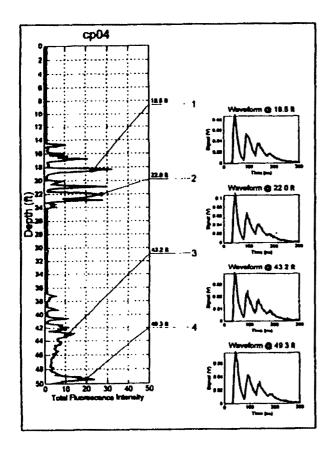
Air Force Base Georgia



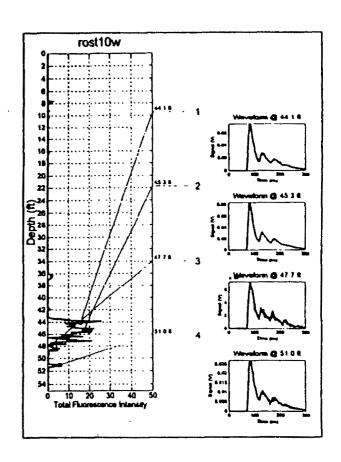
Military Facility
Arizona



ROST™ Gasoline Waveforms



cpt_2



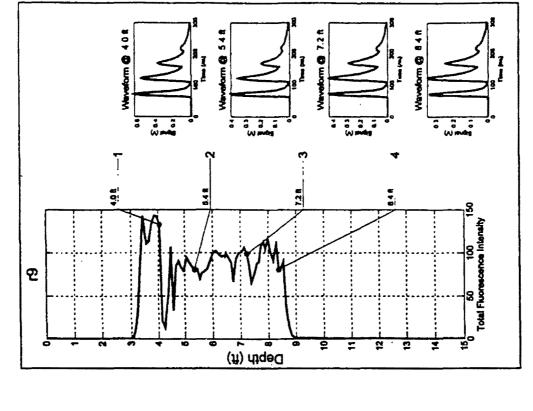
Pipeline Site Mississippi

Underground Storage Tank Site Texas

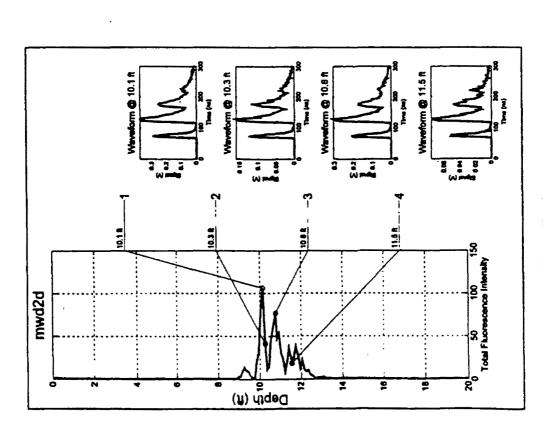
Petroleum Refinery California



ROST™ Diesel Waveforms



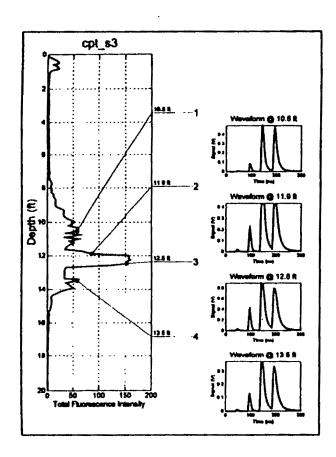


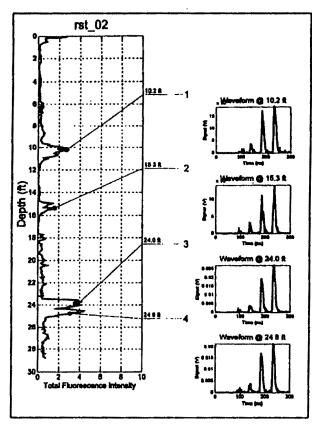


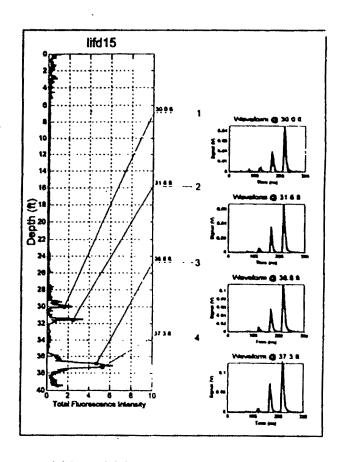
Pipeline Release Georgia



ROST™ Coal Tar/Creosote Waveforms







Tar Site Texas

Wood Treatment Facility
Mississippi

Wood Treatment Facility
Virginia



APPENDIX F GROUNDWATER SAMPLING AND MONITORING FIELD DATA SHEETS

WELL GAUGING FORM

Date 3/17	/03	Contractor Project No	. WAI -	007				
Location	11400	Long Beach	Blud.		Page_	1	_ of	1
Contractor	Winefiel	di Association	Gauged by:	Sheila K. Morrissey				

Contracto		inepela	* Assoc	iates	Gauged by	: Ona	Lak. Mo	rrissec	1
WELL I.D.	WELL DIAM.	GAUGING ORDER	DEPTH TO PRODUCT	DEPTH TO WATER	DEPTH TO WATER (CHECK)	DEPTH TO WELL BOTTOM	PRODUCT THICKNESS	LENGTH OF WATER COLUMN	COMMENTS
MW-24	4	1	•	23.10	23.10	41.59		18.49	
MW-23	4	2	_	22.40	22.40	44.50	1	22.10	
MW-33	4	3	_	22.05	27.05	43.60		21.55	
MW-13	4	4	-	23.77	23.77	44.30	-	20.53	
MW-19	4	5	-	23.20	23,20	41.28	-	18.08	
MW-6	4	6	-	22.85	77.85	41.02	_	18 . 17	
MW-17	4	7	-	72.95	22.95	43.77	1	20.82	
MW-H	4	8	-	23.96	23.96	43,44	-	19,48	
							•		
							·		
									· · · · · · · · · · · · · · · · · · ·

Note: Gauging order shows cleanest to dirtiest based on analytical results from last quarter.

Contractor Job No		-007								
Station No		600 Loro	1 Berch B	lud.		Page of				
Contractor	Junfield &	Associal	es	Sampler_	Sheilak.L	forrissey				
Well ID: MW- 7	24 3 3 3 3	Well Diameter:	4-10-		epth-to Water: 2.	3.10				
Gauging Date: 3/		Purging Method:		(Vac)	epth-to-Bottom: CI	1059m				
Purging Date: 3/		Sampling Method:		Company of the Section	Vater Column (ft): 15					
Sampling Date:3	17/03									
-,		State of the state			Manager and Secretary	8.6 - 4.7 / , y p				
WELL PURGING:										
Calculate volume of wa	ater to purge:			Multipliers for converting lengt	h of water column (feet) to gallons:					
10	ંંવ	,3	⊘ gals	Well Dismeter Multiplier	Well Diameter Multiplier 3 inch 0 37	Well Diameter Multiplier 6 inch 1 47				
98	als x	*	gals	2 inch 0 16	4 inch 0.65	other reduc (squared) x 0 163				
(1 casing volume)	(no. of volumes	to purge) (total	volume to purge)]		,				
	0830		h	ydac.						
Purge Start Time:		Water Qual. Instru	incin oucu.	TARC.						
	0837	0843	0849	4 +	Ge	MMENTS				
TIME	66.8	68.4	69.9							
TEMP (°F)	6.06	6.13	6.17		*					
CONDUCTIVITY	3400	3410	3480							
TURBIDITY	clear	clear	clear							
GALS REMOVED	13	25	36							
DO	Pre-Purge Time_	Readin	9	Post-Recharge Time	Reading					
REDOX	Pre-Purge Time	Readin	9	Post-Recharge Time	eReading					
Total Gallons Purged	: 36		Water Storage/Disp	posal Method VaC	truck No. of	Drums Used				
Did Well Dewater?	<u>no</u>									
WELL SAMPLING:	000	-	7710							
Sampling Time	0858	Recharge Level	3.68							
Laboratory	Klierra									
Analyses Requested: T	PHgBTEX	MTBEOthe	or							
		Duplicate ID		···						
Equipment Blank ID										
WELL INSPECTION:	_		0-1-1		/ //	halt)				
Well Cap Secured		Well Cap Locked	110 WCK	Traffic Cover Secured		KBII).				
Well Box Cleaned and										
Repair/Replacement Pe	erformed	one								
	Repair/Replacement Nooded 1 bolt missing, other bolt not threaded.									
Repair/Replacement Ne	beded 1 100	olt missia,	g, other	DOIT NOT THE	paea.					

Contractor Job No.	WAL-	<i>0</i> 07							
Station No	Location 1	600 Long	Beach Bu	d				Page	(of
Contractor	inefluld &	Associates			mpler_	Ster	61	<. Ū	orr. ssey
Well ID: MW A	· •	יייייין, ווייי	MINER OF THE PARTY HAS TO SEE HER TO SEE					2240	
Gauging Date:									M EST OF THE SECOND SE
Purging Date: 2		ing in this					1174.601		de arrive
Sampling Date:	以下2000年1月1日 1月1日 1月1日								enson. Na
									, e
WELL PURGING:									
Calculate volume of wat	er to purge:	1		Multipliers for co	onverting length	of water column (fe	et) to gallons,		
14	,3	_ 43	2 /	Wel Diameter	Multiplier 0.04	Well Diameter 3 inch	Multiplier 0.37	Well Drameter 6 inch	Multipler
gai	s x	*	gals	2 inch	0.04	4 inch	0 85		nadrus (squared) ± 0 163
(1 casing volume)	(no. of volumes	to purge) (total	volume to purge)	JL					·
· 00	940	101-4 0 1-1	h.	, dac					
Purge Start Time:	/	Water Qual. Instru	ment Used:	4		,		MMENTS	· · · · · · · · · · · · · · · · · · ·
TIME	10947	0951	0958	 		-		MMENIS	
TEMP (°F)	71.2	70.1	68-9	<u> </u>					
рН	7,47	7.45	6.60						
CONDUCTIVITY	2660	2480	2480	1					
TURBIDITY	clear	clear	Clear						
GALS REMOVED	20	30	45]					
DO	Pre-Purge Time	Reading	1	Post-Recha	irge Time	<u>. </u>	_Reading		
REDOX	Pre-Purge Time			Post-Recha	_		_Reading		
Total Gallons Purged:	45		Water Storage/Disp	osal Method_	VAC	Truck	No of	Drums Use	d
Did Well Dewater?	<u> 100 </u>								
WELL SAMPLING:	0.50		15 ns						
Sampling Time	958	Recharge Level	(3, 05)	ا ا صدما					
Laboratory				rqua.					
Analyses Requested TF			'						
Trip Blank ID Equipment Blank ID									
Equipment blank 10		_							
WELL INSPECTION:							_		
Well Cap Secured		Well Cap Locked	no lock	Traffic Cove	r Secured	3/			
Well Box Cleaned and Fi									
Repair/Replacement Per		ne						_	
			-						
Repair/Replacement Nee	oded Nor	Le							

Contractor Job No	MAT-	007				r
Station No	_ Location	11600 Long	Beach Bluo	l		Page of
ContractorV	Dinefield 4.	Associated	7 .	Sample	Shile	K. Morrissey
Well ID: MW		Wei Contact			i de la constant	12:05 U
Gauging Date:	COLUMN TO THE PROPERTY OF THE	and the contract of the contra		a atau atau (da ariata kata kinda atiki ari		L MOEGO
Purging Date:	THE REPORT OF THE PARTY OF THE	Charles tells	504 (00)4(00)426(00)41111111	Mark Land Andrews St. St. Co., St. St. St. St.	The second secon	0.485
Sampling Date:	ルンプライのこう。インダイルとはあります。					
5020			es y valoris (e)			
WELL PURGING:				, ,		
Calculate volume of wat	ter to purge:			Multipliers for converting to	ngth of water column (fee	at) to gallons
14	ls x3	=	Wel Districtor Multiplier 1 Inch 0.04 2 Inch 0.16	Wel Diameter 3 inch 4 inch	Multiplier Well Districtor Multiplier 0.37 6 inch 1.47 0.65 other reduce (squared i.i.d.162	
(1 casing volume)	(no of volumes	to purge) (tota	I volume to purge)			
Purge Start Time:	1038	Water Qual. Instru	ment Used:	ydac .		
	1	2	3	4		COMMENTS
TIME	1049	1052	1055			
TEMP (°F)	73.4	71.0	69.8			
рН	7.35	7.25	7.32	ļ		
CONDUCTIVITY	2340	2310	2280	-		
TURBIDITY	clear	clear	clear			
GALS REMOVED	20	30	45	1		
00	Pre-Purge Time_		-	Post-Recharge Ti		Reading
REDOX	Pre-Purge Time_ 45	Readin		Post-Recharge Ti		Reading
Total Gallons Purged:			Water Storage/Disp	oosal Method <u>Vac</u>	Truck	No. of Drums Used
Did Well Dewater?	<u>no</u>					
WELL SAMPLING:	055	Recharge Level	24 50			
	lierra, J	Oned -	20			
Analyses Requested: TF	•	MTBEOthe	or			
	()8 O (W
Equipment Blank ID	•			•		
		-				
WELL INSPECTION:						
Well Cap Secured		Well Cap Locked	no lock	Traffic Cover Secur	edbe	
Well Box Cleaned and F	ree of Water					
Repair/Replacement Per	rformedh	one		***************************************		
	V. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19		· · · · · · · · · · · · · · · · · · ·			
Repair/Replacement New	tonbebe	<u> </u>				
i I						

Contractor Job No	WAI-	202						
Station No	Location 114	00 Long B	each Blud	•				Page of
Contractor $\overline{\mathcal{W}}$				Sa	ampler_	Sheile	K.L	larrsseg
Well ID: MW-1 Gauging Date: 3/ Purging Date: 3/	2 4 10 10 10 10	Wall-bin Yes				eon eo Vere	n 200	972
Gauging Date: 3	a la la la la la la la la la la la la la	รัฐการาสาปการ				4-1-0-c/-1-c		1.30
Purging Date: 3		Atation (Alexander)	diamental and and the second			î a Çaniy		<u> 20.53</u>
Sampling Date: 3				ALLESSON CONTRACT	AND AND ASS.			
			1,500 700 700					
WELL PURGING:				1 <u></u>				
Calculate volume of wa	iter to purge.			Multipliers for co	onverting longit	h of water column (fe	et) to gallons	
13.3 ga	ls x <u>3</u>	<u> 39</u>	,9 gals	Well Discouler 1 inch	0 04	Well Diameter 3 inch	Multipler 0 37	Well Dismester Multipoles 5 inch 1 47
(1 casing volume)	(no. of volumes t	to purge) (total	volume to purge)	2 inch	0 16	(inch	0 65	other midius (squianed ; x 0 183
Purge Start Time:	1147	Water Qual, Instru	ment Used	ydac				
ruige Start Time	1	2	3	1 4			C	DMMENTS
TIME	1157	1200	1206					
TEMP (°F)	76.6	71.8	69.5					
рН	7.53	7.42	7.18					
CONDUCTIVITY	2580	2530	2490					
TURBIDITY	clear	clear	clear					
GALS REMOVED	15	26	40	<u> </u>				
∞	Pre-Purge Time	Readin	<u> </u>	Post-Rech	arge Time		_Reading	
REDOX	Pre-Purge Time			Post-Rech	_		- '	
Total Gallons Purged:	40		Water Storage/Disp	osal Method_	<u> </u>	3 42	No. of	Drums Used
Did Well Dewater?	no							
WELL SAMPLING.	209	Recharge Level	24 103					
,	diacco	Tones	~ (, 0)					
Laboratory		·						
Analyses Requested: T	"	MTBEOthe	·					
Equipment Blank ID				•				
		-						
WELL INSPECTION:							-	
Well Cap Secured		Well Cap Locked	10 no boch	Traffic Cove	er Secured			
Well Box Cleaned and f	Free of Water							
Repair/Replacement Pe	orformed Man	<u> </u>						
Repair/Replacement Ne	eded Non	4						
								Minimum
l								

Contractor Job No	WAI-	-007				
Station No	_ Location	600 Lon	g Beach R	sivd.	Page o	of
Contractor 📉	Direfield	éAssoc.	_ I	Sampler	Sheilak Morrisse	-1
Well ID: MW	and the	Walter			anti-to Water 23 Zo	
Gauging Date: 3	THE PROPERTY OF THE PROPERTY O				41.28	
Purging Date: 29	Selection of	Transfer (*)			Ann Column (ii) 28 08	
Sampling Date: 37		ing. Taganggan		300.753		
			are the second			
WELL PURGING:						
Calculate volume of wat	ter to purge.		1	Multipliers for converting long	th of water column (feet) to gallons	
11.8	s x _3	, 35) , 4 gals	Well Dismeter Multiplier	Well Dismater Multiplier Well Dismater Multiplier 3 Inch 0.37 6 Inch 1.47	
				2 inch 0 16		Egit Citi Dene
(1 casing volume)	(no. of volumes	to purge) (total	volume to purge)	J (···
Purge Start Time	1317	Water Qual. Instru	ment Used: h	ydac		
	1	2	3	4	COMMENTS	
TIME	1322	1328	1333		Coarse Sand	
TEMP (°F)	74.5	71.5	71.6		being pumped or	it
ρΗ	7.60	7.69	7.56			•
CONDUCTIVITY	1980	1850	1900			
TURBIDITY	clear	clear	clear			
GALS, REMOVED	13	24	36			
00	Pre-Purge Time	Readin	9	Post-Recharge Tim	eReading	
REDOX	Pre-Purge Time			Post-Recharge Time		
Total Gallons Purged:	-		Water Storage/Disp	oosal Method YAC	TYUCK No. of Drums Used	
Did Well Dewater?	no.					
WELL SAMPLING:	ابدد		74 Lau		-	
Sampling Time	227	Recharge Level	291,009			
		ones.				
Analyses Requested TF			r			
		-		-		
Equipment Blank ID		_				
WELL INSPECTION:						
Well Cap Secured	_	Well Cap Locked	no lock	Traffic Cover Secured		
Well Box Cleaned and F	ree of Water					
Repair/Replacement Per	formed NO	Ne				
	A -					
Repair/Replacement Nee	eded	ب				

Contractor Job No.	WAI-O	<u>07</u>	arthur manuar		
Station No.	_ Location	600 km	a Beach B	ol Vd.	of
Contractor	Vinefield 4	Assoc.	-1	Samp	oler Sheilak Marrissey
Well ID: MW-6		mai donate.			Durb Water 22:95
Gauging Date:		Carana melecia			County Retroit Service Co.
Purging Date:					The string 18-17
Sampling Date:					
WELL PURGING:				, p	<u></u>
Calculate volume of wal	ter to purge:			Multipliers for converts	ing length of water column (feet) to gallons
11 42	3	3	5.4	Well Diagneter Multi	initer <u>Wet Diameter Multiplier Wet Diameter Multiplier</u> .04 3 Inch 0 37 6 inch 1 47
ga	is x		gals	f t	.16 4 inch 0.65 other redux (squered) x 0 163
(1 casing volume)	(no of volumes	to purge) (tota	volume to purge)		
	1406		1	mydac	
Purge Start Time:	- 	Water Qual, Instru	ment Usea:	<u> </u>	
	1 1	1425	1440	4	COMMENTS
TIME	1415				A lot of sand
TEMP (°F)	7,54	7.45	<u>63.3</u> 7.50		pumped.
pH	3450	3420	2520		Slow recharge.
TURBIDITY	d. turvid	clear	v. turbid		NIBD TECTORIZE.
GALS. REMOVED	12	24	36		
DO	Pre-Purge Time	I		Post-Recharge	Time Reading
REDOX	Pre-Purge Time			Post-Recharge	
Total Gallons Purged:	71.		Water Storage/Disp	~ /	AC TYLCK No. of Drums Used
Did Well Dewster?	,7 G			_	
	. 159	50	\ \rightarrow		
WELL SAMPLING:	1225		300<45	23,20	ı.
Sampling Time	erra Jo	Recharge Level		7.0	
Analyses Requested: TF		ACTOC ON			
		MIBEOther			
Equipment Blank ID				•	
		_			
WELL INSPECTION:					
Well Cap Secured	~	Well Cap Locked	no lock	Traffic Cover Sec	cured
Well Box Cleaned and F				•	
Repair/Replacement Per	10.0	re			
Repair/Replacement Nee	eded nov	1e			

			#		

Contractor Job No.	WAI-	007					ł
Station No	Location II (p	00 Lone	beach Blu	d ·		Pag	jeof
Contractor	Jivefield	à Asson.	- 1	Samp	pler Should	41	ssez
Well ID: MW#		Weighter				200	95
Gauging Date: 5/1							77
Purging Date:			and the second		. Tyrir gernagi		2
Sampling Date:	对为它是从外外通过的事实的						
							(4.85)
WELL PURGING:	,						te make
	as to murner	1		Multipliers for convert	ling length of water column (feet) to gellons,	
Calculate volume of wat	· · · · · · ·	4	n E	1	Notes Well Discusses	Multiplier Well Co	musica Writingles
gal:	s, x — — — —	=	U 1 5 gals	11	0,04 3 inch 0.16 4 Inch		inch 147 her nedius(squared)±0163
(1 casing volume)	(no. of volumes	to purge) (total	volume to purge)				
	1606		h	ydac	,		
Purge Start Time:	12 UD	Water Qual. Instru	ment Used:				
	1	2	3	4		COMMEN	TS
TIME	1513	1517	1521	ļ			
TEMP (°F)	67.9	60.0	67.9				
рН	7.58	7-51	7/35	<u> </u>			
CONDUCTIVITY	2470	2400	2340	ļ		<i></i>	
TURBIDITY	31.turbol	clear	clear	ļ			
GALS REMOVED	1-14	30	41	<u> </u>			
∞	Pre-Purge Time			Post-Recharge		Reading	
REDOX	Pre-Purge Time	Reading			Time	Reading	
Total Gallons Purged:		ļ	Water Storage/Disp	osal MethodV	lac truck	No. of Drums	Used
Did Well Dewater?	no						
WELL SAMPLING:	525	Recharge Level	24 17				
Sampling Time			2 (.01				
Laboratory	dierra, J	ores.					
Analyses Requested: TP		_ MTBE Other					
Tnp Blank ID		Duplicate ID		,			
Equipment Blank ID		_					
MEL INSPECTION	_				,		
WELL INSPECTION:		Well Cap Locked	00/01		· '/		
Well Cap Secured		vveil Cap Locked	W COCK	Traffic Cover Se	ocured	•	
Well Box Cleaned and Fr	00.00						
Repair/Replacement Per	rormed r						
	ded Non	p					
Repair/Replacement Nee	ded / VP / C						

Contractor Job No	WAI-	007							
Station No	Location 11 (c	00 LongB	eachBlud					Page_[of
Contractor	Winefield &			Sa	ampler >	Sheilal	K.Mor	rissey	
Well ID: MW	PROPERTY OF STREET	CONTROL BUT TO BE TO SOME MARKET MARKET MARKET AND A SOME AND A SO			21 22 20 20 10 20 20			THEY LA	
Gauging Date:		ananga Pelpada						的林田	(-
Purging Date:		Grandina (Mes)			ing and the second	1.5 - 1.5 E 11.55		48	
Sampling Date:									77. Ca
		Swie was a state of		Mr. del		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			time .
WELL PURGING:	#								
Calculate volume of wat	ter to purpe:			Multipliers for co	onverting length	of weter column (f	eet) to gallons		
12.7 gal		29	≈ 1 .	Well Dismotor		Wel Diameter	Multipler		Multiplier
	s x	<u> </u>	O gals	1 inch 2 inch	0.04 0.16	3 Inch 4 Inch	0 65	6 inch other ned	147 Nus(squared::0163
(1 casing volume)	(no. of volumes to	purge) (total	volume to purge)][<u>_</u>	
	11.21		h	1dac					
Purge Start Time:		Water Qual. Instru	ment Used:						
T1145	1641	1648	1653	-4			CON	MENTS	
TEMP (°F)	68.6	47.9	69.0	+					
pH	7.62	7.58	7,51	 					
CONDUCTIVITY	3840	3460	3280						
TURBIDITY	clear	class	clear						
GALS REMOVED	13	26	39			• • • • • • • • • • • • • • • • • • • •			
∞	Pre-Purge Time	Readin	9	Post-Recha	arge Time		Reading_		_
REDOX	Pre-Purge Time	Readin	g	Post-Recha	arge Time		_Reading_		_
Total Gallons Purged:	39		Water Storage/Disp	posal Method_	Yac	truck	No. of C	Orums Used_	
Did Well Dewater?	no,								
	1								
WELL SAMPLING:	400	V	11 67						
Sampling Time		Recharge Level	1657						
Laboratory	Siera,	Vones.							
Analyses Requested TF		_ MTBE Othe	or						_
'	-	Duplicate ID		-					
Equipment Blank ID		•							
WELL INSPECTION:									
Well Cap Secured	/ ,	Nell Cap Locked <u> </u>	ro boch	Traffic Cove	c Secured	1/			
Well Box Cleaned and F		Court Court Court	<u> </u>	1141110 0044	. 5000100	<u>v</u>			
Repair/Replacement Per		l							
The state of the s			,				 -		
Repair/Replacement Nee	oded Nohl				<u> </u>				
								-	
				· · · · · · · · · · · · · · · · · · ·					

WELL GAUGING FORM

Date 3-21-03 Contractor Project No. LYN-06-202

Location 11600 Long Beach Blvd.

Contractor Wivefield & Associates Gauged by: Sheila K. Morrissey Page___i of ____i DEPTH TO DEPTH TO LENGTH OF **DEPTH TO** WELL GAUGING DEPTH TO **PRODUCT** WATER WATER WELL COLUMN WELL I.D. BOTTOM THICKNESS DIAM. ORDER **PRODUCT** WATER (CHECK) COMMENTS W. A - MW-2 23.58 23.58 44.88 21.30 21.78 23.12 23.12 4490 WA - MW-3 17.70 22.70 44.89 W. A-MW4 2 22.19 |23.70 | 23.70 | 44.85 | WELLMW-1 Z 21.15 MN-17 4 23.00 23.00 43.75 20.76

Note Gauging order shows cleanest to dirtiest based on analytical results from last quarter.

Contractor Job No LYN-C	202-202								
Station No Location 11	600 LonaR	Seach Blu	d Lynno	od.		Paget of	1		
Station No Location 11 Contractor Winfield ?	Associates		Sampler	Sheila		loccissey			
Well ID: WY ARROY	Wei Gamen.	2-4-A			72 S	158 180			
Gauging Date: 6/21/03	Pure no Methods	海里以及5000000		San A. San		085			
Rurging Date: 3/21/2033	Striction Values	3.5	rainas derige			130%+1			
Sampling Date: 48/2006							. ·.		
							ا رائي		
WELL PURGING:							-		
Calculate volume of water to purge:			Multipliers for converting leng	th of water column (fe	ed) to gallons:				
2	10	. 2gals	Wei Diameter Multipler	Wol Diameter	Multiplier	Wel Diameter Multipler			
gals x	= 10	gals	1 inch 0.0	3 inch 4 inch	0.37 0.65	6 inch 1 47 other radius (squared) x 0	163		
(1 casing volume) (no. of volumes	s to purge) (total	volume to purge)		, 		·			
0858 hydre									
Purge Start Time:0853	Water Qual, Instru	ment Used:	7440						
1	2	3	4		co	MMENTS			
TIME 0854	0828	0900	1			T			
TEMP (°F) 64.7	7.60	45.3							
PH (.0)		7.59	-						
CONDUCTIVITY 3330	3350	3350	-			· · · · · · · · · · · · · · · · · · ·			
TURBIDITY St. twbid	Clear	Cloar	1						
GALS. REMOVED		1.5	LL						
Pre-Purge Time_			Post-Recharge Tim		_Reading_				
REDOX Pre-Purge Time_			Post-Recharge Tim	, ,	_Reading_				
00	•	Water Storage/Disp	osal Method Vac	- ITUCK	No. of	Drums Used			
Did Well Dewater? 10									
WELL SAMPLING:	Recharge Level	391							
Sampling Time	Recharge Level								
	ACTOC ON .	_							
Analyses Requested: TPHgBTEX Tnp Blank ID	MTBE Othe _ Duplicate ID	r				**************************************			
Equipment Blank ID			•						
equipment blank to									
WELL INSPECTION:									
Well Cap Secured	Well Cap Locked	10	Traffic Cover Secure						
Well Box Cleaned and Free of Water	VIOLOGIA COCKOO	<u> </u>	. ramo ovra osculo	*					
Repair/Replacement Performed									
									
Repair/Replacement Needed	***************************************								
							—		
		····							

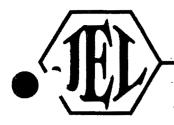
Contractor Job No	アイガー0	6-202					
Station No		_	seach Blod	. Lynwa	sol		Page of
Contractor W:	refield ;,	4ssoc.	_	Sampler	Dui	Lak.	Horrissen
Well ID: W4 A PO Gauging Date: S/ Purging Date: S/ Sampling Date: S/ WELL PURGING:	<u> </u>	a Africa Pri			ton.		1975 1975 178
Calculate volume of water			O , 5 gals	Multipliers for converting len Well Diameter Multiplier 1 Inch 0.04 2 Inch 0.16	gth of water column (for <u>Well Diameter</u> 3 Inch 4 Inch	Multipliex 0 37 0 65	Well Diameter Multiples 8 inch 1 47 other radius (squared) x 0 163
Purge Start Time:	7928	Water Qual. Instru	ment Used: No	1dac			
	1	2	3	4		co	MMENTS
TIME	0931	0933	0935				
TEMP (°F)	66.3	68,3	48.4				
рН	7.48	7.47	7.47				
CONDUCTIVITY	3170	3240	3260				
TURBIDITY	d.twhid	Sl.twbid	SI. tubid		ξ,		
GALS. REMOVED	3	8	11				
DO	Pre-Purge Time	Readin	9	Post-Recharge Tin	ne	_Reading_	
REDOX	Pre-Purge Time	Readin	1	Post-Recharge Tim	ne	_Reading_	
Total Gallons Purged:_			Water Storage/Dispo	osal Method Vac	truch	No. of	Drums Used
Oid Well Dewater?	<u>00</u>			•			
WELL SAMPLING: Sampling Time Laboratory Analyses Requested: TP	736 048, 1		23.57 Trosect	^			
Trip Blank IDEquipment Blank ID		Duplicate ID					
WELL INSPECTION: Well Cap Secured Well Box Cleaned and Fi Repair/Replacement Perl	ree of Water	Well Cap Locked	no_	Traffic Cover Secure	d_ V		
Repair/Replacement Nee	ded						

Contractor Job No.	哲区	-06-20	2		0		
Station No	Location (10	,00 honge	Beach Blue	x, Lynwo	od	Page	
Contractor	Sinefield	4 Assoc	•	Sampler	Thila	K. Mor	
Well ID: WAA	ND SG	Well Diameter	Z/5/6*****		CONTRACTOR DESCRIPTION OF THE PROPERTY OF THE	88ZZ 7	
Gauging Date:	e 1/00 *	infilte (nice)	205.V/20534		palete year falle.		g
Purging Date: 8/						T 60 1	
Sampling Date:	THE RESERVE AND THE PARTY OF TH						
WELL PURGING:							
Calculate volume of wat				Multipliers for converting len	ngth of water column (feel	t) to galions	
3.6 gal	.,≾.	_ 10) , S als	Well Diameter Multiplier	Well Diameter 3 inch	Multiplier Well Diame 0.37 6 inch	
		-	yuio	2 inch 0 18	4 inch	0.65 other	radius (squared) x 0 163
(1 casing volume)	(no. of volumes t	o purge) (total	volume to purge)				
Purge Start Time:	1006	Water Qual. Instru	ment Used: N	ydac	y l		
	1	2	3	4		COMMENTS	<u> </u>
TIME	1008	1010	1012				M
TEMP (°F)	73.1	72.8	72.5				
рн 7.	396-97	7.34	7.33		,		
CONDUCTIVITY	2330	2260	2230				
TURBIDITY	81. tubid.	clear	clear		•		
GALS. REMOVED	1 4	8					
00	Pre-Purge Time	Reading	9	Post-Recharge Tir	ne	Reading	
REDOX		Readin		Post-Recharge Tin		Reading	
Total Gallons Purged:			Water Storage/Disp	osal Method $V \alpha C$	Truck	No. of Drums U	sed
Did Well Dewater?	no						
WELL SAMPLING:	110		73 (20)				
Sampling Time/C		Recharge Level	23.08				
Laboratory	ONES						
Analyses Requested: TF			r				***************************************
		Duplicate ID					
Equipment Blank ID		_					
WELL INSPECTION:	,				_	_	
Well Cap Secured	V	Well Cap Locked	no	Traffic Cover Secure	w 1		
Well Box Cleaned and F		Ven Cap Locked		TIBLIC COVER SECURE			
Repair/Replacement Per		7					
Topolii replacement Fet					***. *********************************		
Repair/Replacement Nee	eded					······································	
The participation of the second							
			***************************************			~	

Contractor Job No.	LYN-	-06-20	<u>_</u>	O A /	{	١	
Station No	_ Locationl	1600 Loi	naBeau	. Bud . L	Tumpo	ί	Page of
Contractor W	inefield	4. Associ	cites	Sampler	Sheila	<u>.K. M</u>	orrissey
Well ID: WAA	AM)=1	Well Diameter	W. Suitania	THE SHEET STREET, WHEN INTO THE PARTY OF THE	AND SOME	23	70
Gauging Date:	File (S	(Eugopea) forces	NAC.				285 %
Purging Date:		edigalicaCritica					MENUS PARTY
Sampling Date:							
WELL PURGING:				,			
Calculate volume of wal	ter to purge:			Multipliers for converting long	jth of water column (fe	set) lo gallons:	
	s x 3	- 10), Z _{gals}	Well Diameter Multiplier	Woll Diameter 3 inch	Multiplier 0 37	Well Diameter Multiplier 6 inch 1 47
gai	s x	=!	gais	2 inch 0.16	4 inch	0 65	other radius (squared) x 0 163
(1 casing volume)	(no. of volumes	to purge) (total	volume to purge)				
Purge Start Time:	1033	Minkay Over 1 1-14	h	ydac			
Purge Start Time:	1	Water Qual. Instru	ment Used:			CO	MMENTS
TIME	1035	1037	1039				MINE(N13
TEMP (°F)	77.7	73.9	73.3				
pH 7.34		7.38	7.41				
CONDUCTIVITY	1750	1500	1430			H.A. G. C. C.	
TURBIDITY	twbid	SI. tubid	Sl. twbid				
GALS. REMOVED	4	8	11				Types Addition to the second s
DO	Pre-Purge Time	Readin	g	Post-Recharge Tim	le	_Reading	
REDOX	Pre-Purge Time	Readin	g	Post-Recharge Tim	ıe	_Reading	
Total Gallons Purged:	ł (Water Storage/Disp	osal Method		No. of	Drums Used
Did Well Dewater?	no						
WELL SAMPLING:	1 11-		75.00				
Sampling Time	1046		25,00				
Laboratory X	ones, H	iciologic	wrech.				
	PHQ_BTEX_	_ MTBE Other					- Miles
Laboratory X							
Laboratory Analyses Requested: TR		MTBE Oth		-			
Laboratory Analyses Requested: TF Trip Blank ID Equipment Blank ID		MTBE Oth		-			
Laboratory Analyses Requested: The Trip Blank ID Equipment Blank ID WELL INSPECTION:		MTBEOthe	er				
Laboratory Analyses Requested: The Trip Blank ID Equipment Blank ID WELL INSPECTION: Well Cap Secured	<u> </u>	MTBE Oth	er	Traffic Cover Secure	d		
Laboratory Analyses Requested: Ti Trip Blank ID Equipment Blank ID WELL INSPECTION: Well Cap Secured Well Box Cleaned and F	ree of Water	MTBEOthe	er	Traffic Cover Secure	8 <u> </u>		
Laboratory Analyses Requested: The Trip Blank ID Equipment Blank ID WELL INSPECTION: Well Cap Secured	ree of Water	MTBEOthe	er	Traffic Cover Secure	d		
Analyses Requested: The Trip Blank ID Equipment Blank ID WELL INSPECTION: Well Cap Secured Well Box Cleaned and F Repair/Replacement Per	free of Water	MTBEOthe	er	Traffic Cover Secure	d_ V		
Laboratory Analyses Requested: Ti Trip Blank ID Equipment Blank ID WELL INSPECTION: Well Cap Secured Well Box Cleaned and F	free of Water	MTBEOthe	er	Traffic Cover Secure	d		
Analyses Requested: The Trip Blank ID Equipment Blank ID WELL INSPECTION: Well Cap Secured Well Box Cleaned and F Repair/Replacement Per	free of Water	MTBEOthe	er	Traffic Cover Secure	6		

Contractor Job No.	<u> </u>	06-20	2			
Station No	Location 114	oo Long	Beach Blue	d. Lynwod	od .	Page of
Station No	inefield ?	Associa	tes	Sampler	Sheilak. Mo	rassen
Well ID: MW						
WELL PURGING:						
Calculate volume of wat	s x 3		osgals volume to purge) ment Used:	Multipliers for converting leng Well Diameter Multiplier 1 Inch 0 04 2 Inch 0 18	th of water column (feet) to gallons: Well Diameter Multipler 3 inch 0.33 4 inch 0.85	Well Diameter Multiplier 6 inch 1 47 other radius (squared) x 0.163
	1 1121	2	3 1134	4	COI	MMENTS
TIME TEMP (°F) pH CONDUCTIVITY TURBIDITY GALS. REMOVED	79.4 7.39 2110 Clear 14	77.3 7.41 2170 Clear 28	76.1 7.42 2090 clear 11	Post-Recharge Tim	e Reading	
REDOX Total Gallons Purged:	Pre-Purge Time_	Reading		Post-Recharge Tim		
Laboratory	HgBTEX	Recharge Level Charlech MTBE Duplicate ID				
WELL INSPECTION: Well Cap Secured Well Box Cleaned and F. Repair/Replacement Per	ree of Water	Well Cap Locked	no_	Traffic Cover Secure		
Repair/Replacement Nee	eded	1 bolt	missin	g, other	doesn't th	ured

APPENDIX G SOIL LABORATORY REPORTS AND C-O-C RECORDS



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY REPORT

Client:
Client Address:

WINEFIELD & ASSOCIATES, INC.

110 Pine Ave., Suite 900

Long Beach, CA 90802

Report Date:

02/12/03

JEL Ref. No.:

C-0492

Attn:

Hector Garcia

Date Sampled:

02/10/03

Project:

Lynwood Springs

Date Received:

02/10/03

Project

Lynwood Springs

Date Analyzed:

02/10/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

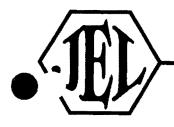
Soil/Water

ANALYSES REQUESTED

1. EPA 5035B/8260B- Volatile Organics by GC/MS + Oxygenates

Approval:

Steve Jones, Ph.D. Laboratory Manager



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

02/12/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

C-0492

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled:

02/10/03

Project:

Date Received:

02/10/03

Lynwood Springs

Date Analyzed:

02/10/03

Project Address:

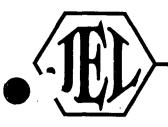
11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

			Oxygenates		
Sample ID:	<u>W&AMW1</u> <u>-26</u>	<u>W&AMW4</u> <u>-25</u>		Practical Quantitation Limits	<u>Units</u>
Analytes:					
Benzene	ND	ND		2.0	ug/Kg
Bromodichloromethane	ND	ND		2.0	ug/Kg
Bromoform	ND	ND		2.0	ug/Kg
Bromomethane	ND	ND		2.0	ug/Kg
n-Butylbenzene	ND	ND		2.0	ug/Kg
sec-Butylbenzene	ND	ND		2.0	ug/Kg
tert-Butylbenzene	ND	ND		2.0	ug/Kg
Carbon tetrachloride	ND	ND		2.0	ug/Kg
Chlorobenzene	ND	ND		2.0	ug/Kg
Chloroethane	ND	ND		2.0	ug/Kg
Chloroform	ND	ND		2.0	ug/Kg
Chloromethane	ND	ND		2.0	ug/Kg
2-Chlorotoluene	ND	ND		2.0	ug/Kg
4-Chlorotoluene	ND	ND		2.0	ug/Kg
Dibromochloromethane	ND	ND		2.0	ug/Kg
1,2-Dibromo-3-chloropropane	ND	ND		2.0	ug/Kg
1,2-Dibromoethane (EDB)	ND	ND		2.0	ug/Kg
Dibromomethane	ND	ND		2.0	ug/Kg
1,2- Dichlorobenzene	ND	ND		2.0	ug/Kg
1,3-Dichlorobenzene	ND	ND		2.0	ug/Kg
1,4-Dichlorobenzenc	ND	ND		2.0	ug/Kg
Dichlorodifluoromethane	ND	ND		2.0	ug/Kg
1,1-Dichloroethane	ND	ND		2.0	ug/Kg
1,2-Dichloroethane	ND	ND		2.0	ug/Kg
1,1-Dichloroethene	ND	ND		2.0	ug/Kg
					5 5



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

02/12/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

C-0492

Long Beach, CA 90802

Date Sampled:

02/10/03

Attn:

Hector Garcia

Date Received:

Project:

Lynwood Springs

Date Analyzed:

02/10/03 02/10/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

			Oxygenates		
Sample ID:	<u>W&AMW1</u> -26	<u>W&AMW4</u> -25		<u>Practical</u> <u>Quantitation</u> <u>Limits</u>	<u>Units</u>
Analytes:					
cis-1,2-Dichloroethene	ND	ND		2.0	ug/Kg
trans-1,2-Dichloroethene	ND	ND		2.0	ug/Kg
1,2-Dichloropropane	ND	ND		2.0	ug/Kg
1,3-Dichloropropane	ND	ND		2.0	ug/Kg
2,2-Dichloropropane	ND	ND		2.0	ug/Kg
1,1-Dichloropropene	ND	ND		2.0	ug/Kg
cıs-1,3-Dichloropropene	ND	ND		2.0	ug/Kg
trans-1,3-Dichloropropene	ND	ND		2.0	ug/Kg
Ethylbenzene	ND	ND		2.0	ug/Kg
Hexachlorobutadiene	ND	ND		2.0	ug/Kg
Isopropyibezene	ND	ND		2.0	ug/Kg
4-Isopropyltoluene	ND	ND		2.0	ug/Kg
Methylene chloride	ND	ND		2.0	ug/Kg
Naphthalene	ND	ND		2.0	ug/Kg
n-Propylbenzene	ND	ND		2.0	ug/Kg
Styrene	ND	ND		2.0	ug/Kg
1,1,1,2-Tetrachloroethane	ND	ND		2.0	ug/Kg
1,1,2,2-Tetrachloroethane	ND	ND		2.0	ug/Kg
Tetrachloroethylene	ND	ND		2.0	ug/Kg
Toluene	ND	ND		2.0	ug/Kg
1,2,3-Trichlorobenzene	ND	ND		2.0	ug/Kg
1,2,4-Trichlorobenzene	ND	ND		2.0	ug/Kg
1,1,1-Trichloroethane	ND	ND		2.0	ug/Kg
1,1,2-Trichloroethane	ND	ND		2.0	ug/Kg
Trichloroethylene	ND	ND		2.0	ug/Kg



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

02/12/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

C-0492

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled:

02/10/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 02/10/03

02/10/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

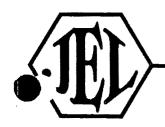
Physical State:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

Sample ID:	<u>W&AMW1</u> -26	<u>W&AMW4</u> <u>-25</u>	Practical Quantitation Un Limits	nits
Analytes:				
Trichlorofluoromethane	ND	ND	2.0 ug/	/Kg
1,2,3-Trichloropropane	ND	ND	2.0 ug/	/Kg
1,2,4-Trimethylbenzene	ND	ND	2.0 ug/	/Kg
1,3,5-Trimethylbenzene	ND	ND	2.0 ug/	/Kg
Vinyl chloride	ND	ND	2.0 ug/	/Kg
Xylenes	ND	ND	2.0 , ug/	/Kg
MTBE	ND	ND	2.0 ug/	Κg
Ethyl-tert-butylether	ND	ND	2.0 ug/	Kg.
Di-isopropylether	ND	ND	2.0 ug/	Κg
tert-amylmethylether	ND	ND	2.0 ug/	Kg
tert-Butylalcohol	ND	ND	2.0 ug/	Kg
Dilution Factor	1	t		
Surrogate Recovery:			QC Limits	
Dibromofluoromethane	103%	103%	60 - 140	
Toluene-d ₈	99%	99%	60 - 140	
4-Bromofluorobenzene	89%	102%	60 - 140	

ND



Testing Laboratories

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JONES ENVIRONMENTAL

QUALITY CONTROL INFORMATION

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

02/12/03

Client Address:

110 Pine Ave., Suite 900 Long Beach, CA 90802

JEL Ref. No.:

C-0492

Hector Garcia

Date Sampled:

02/10/03

Attn:

Date Received:

02/10/03

Project:

Lynwood Springs

Date Analyzed:

02/10/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS

Sample Spiked: W&AM1-26

<u>Parameter</u>	MS <u>Recovery (%)</u>	MSD Recovery (%)	RPD	Acceptability Range (%)
Benzene	93%	99%	5.4%	60 - 140
Chlorobenzene	98%	103%	4.3%	60 - 140
Toluene	99%	105%	6.0%	60 - 140
Trichloroethylene	92%	96%	3.7%	60 - 140
1,1-Dichloroethylene	107%	113%	5.9%	60 - 140

Method Blank = Not Detected

MS

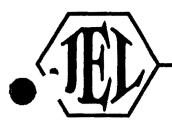
= Matrix Spike

MSD

= Matrix Spike Duplicate

RPD

= Relative Percent Difference



Testing Laboratories

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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

02/12/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

C-0492

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled:

02/10/03

Project:

Lynwood Springs

Date Received:

02/10/03

Date Analyzed:

02/10/03

Project Address:

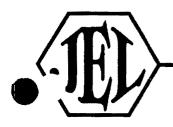
11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

Sample ID:	<u>W&A-ER-</u> <u>1</u>	O'A, gonates	Practical Quantitation Limits	<u>Units</u>
Analytes:				
Benzene	ND		0.5	ug/L
Bromodichloromethane	· ND		0.5	ug/L
Bromoform	ND		0.5	ug/L
Bromomethane	ND		0.5	ug/L
n-Butylbenzene	ND		0.5	ug/L
sec-Butylbenzene	ND		0.5	ug/L
tert-Butylbenzene	ND		0.5	ug/L
Carbon tetrachloride	ND		0.5	ug/L
Chlorobenzene	ND		0.5	ug/L
Chloroethane	ND		0.5	ug/L
Chloroform	ND		0.5	ug/L
Chloromethane	ND		0.5	ug/L
2-Chlorotoluene	ND		0.5	ug/L
4-Chlorotoluene	ND		0.5	ug/L
Dibromochloromethane	ND		0.5	ug/L
1,2-Dibromo-3-chloropropane	ND		0.5	ug/L
1,2-Dibromoethane (EDB)	ND		0.5	ug/L
Dibromomethane	ND		0.5	ug/L
1,2- Dichlorobenzene	ND		0.5	ug/L
1,3-Dichlorobenzene	ND		0.5	ug/L
1,4-Dichlorobenzenc	ND		0.5	ug/L
Dichlorodifluoromethane	ND		0.5	ug/L
1,1-Dichloroethane	ND		0.5	ug/L
1,2-Dichloroethane	ND		0.5	ug/L
1,1-Dichloroethene	ND		0.5	ug/L
				-



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client: Client Address: WINEFIELD & ASSOCIATES, INC.

110 Pine Ave., Suite 900

Long Beach, CA 90802

Report Date: JEL Ref. No.: 02/12/03 C-0492

Hector Garcia

Date Sampled: Date Received: 02/10/03

Project:

Attn:

Lynwood Springs

Date Analyzed:

02/10/03

02/10/03

Project Address:

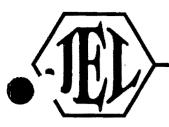
11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

	<u> W&A-ER-</u>		<u>Practical</u>	
Sample ID:	1	Q	<u>uantitation</u>	<u>Units</u>
		',	<u>Limits</u>	
Analytes:				
cis-1,2-Dichloroethene	ND		0.5	ug/L
trans-1,2-Dichloroethene	ND		0.5	ug/L
1,2-Dichloropropane	ND		0.5	ug/L
1,3-Dichloropropane	ND		0.5	ug/L
2,2-Dichloropropane	ND		0.5	ug/L
1,1-Dichloropropene	ND		0.5	ug/L
cis-1,3-Dichloropropene	ND		0.5	ug/L
trans-1,3-Dichloropropene	ND		0.5	ug/L
Ethylbenzene	ND		0.5	ug/L
Hexachlorobutadiene	ND		0.5	ug/L
Isopropylbezene	ND		0.5	ug/L
4-Isopropyltoluene	ND		0.5	ug/L
Methylene chloride	ND		0.5	ug/L
Naphthalene	ND		0.5	ug/L
n-Propylbenzene	ND		0.5	ug/L
Styrene	ND		0.5	ug/L
1,1,1,2-Tetrachloroethane	ND		0.5	ug/L
1,1,2,2-Tetrachloroethane	ND		0.5	ug/L
Tetrachloroethylene	ND		0.5	ug/L
Toluene	ND		0.5	ug/L
1,2,3-Trichlorobenzene	ND		0.5	ug/L
1,2,4-Trichlorobenzene	ND		0.5	ug/L
1,1,1-Trichloroethane	ND	•	0.5	ug/L
1,1,2-Trichloroethane	ND		0.5	ug/L
Trichloroethylene	ND		0.5	ug/L
•				- 0



Testing Laboratories

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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

02/12/03

Client Address:

110 Pine Ave., Suite 900 Long Beach, CA 90802 JEL Ref. No.:

C-0492

Hector Garcia

Date Sampled:

02/10/03

n

Attn:

Date Received:

02/10/03

Project:

Lynwood Springs

Date Analyzed:

02/10/03

Project Address:

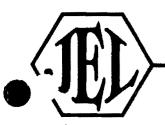
11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

Sample ID:	<u>W&A-ER-</u> <u>1</u>	Practical Quantitation Limits	<u>Units</u>
Analytes:			
Trichlorofluoromethane	ND	0.5	ug/L
1,2,3-Trichloropropane	ND	0.5	ug/L
1,2,4-Trimethylbenzene	ND	0.5	ug/L
1,3,5-Trimethylbenzene	ND	0.5	ug/L
Vinyl chloride	ND	0.5	ug/L
Xylenes	ND	0.5	ug/L
MTBE	ND	0.5	ug/L
Ethyl-tert-butylether	ND	0.5	ug/L
Di-isopropylether	ND	0.5	ug/L
tert-amylmethylether	ND	0.5	ug/L
tert-Butylalcohol	ND	0.5	ug/L
Dilution Factor	1		
Surrogate Recovery:		QC Limits	
Dibromofluoromethane	105%	60 - 140	
Toluene-d ₈	98%	60 - 140	
4-Bromofluorobenzene	102%	60 - 140	



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

QUALITY CONTROL INFORMATION

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

02/12/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

C-0492

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled:

02/10/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 02/10/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

02/10/03

Physical State:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS

Sample Spiked: W&A-ER-1

<u>Parameter</u>	MS Recovery (%)	MSD Recovery (%)	<u>RPD</u>	Acceptability Range (%)
Benzene	96%	96%	0.1%	60 - 140
Chlorobenzene	99%	104%	4.7%	60 - 140
Toluene	94%	101%	7.0%	60 - 140
Trichloroethylene	. 94%	93%	1.8%	60 - 140
1,1-Dichloroethylene	111%	109%	1.7%	60 - 140

Method Blank = Not Detected

MS = Matrix Spike

= Matrix Spike Duplicate MSD RPD = Relative Percent Difference



PO. Box 5387 Fullerton, CA 92838 (714) 449-9937 Fax (714) 449-9685

Chain-of-Custody Record

Client 14/12 - Cald & A	ss ociatas	Date 2/1	0/03					/=	/		A	منصدا	Reque		/ JEL Project #
Project Address	nd Springs	Client Proj	0/03 ect#					Aqueous (Z/S	/	liysis /	negue	' /	// <u>cu492</u>
11600-5	LongbeachBluc	(DEGLimm	d Requested: nediate Attention +c n 24-48 Hours +48 I	.mpëratu visfor5c3	ire C	/	Shugo (St.)	7711/ 544 Aqueous (A)	Total Only		"/ /	/ /	/	//	Page Of Lab Use Only
Lynwnoc Project Contact	H, CA		h 72-96 Hours mal Q of -	neraralys	•		2 / /7	1/8/1/2	1/2	<u>}</u>	//	/	//	//	Sample Condition as Received: Chilled
Sample ID	Sample Location	Date	Time	Laboratory Sample Number	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	S. XIIIEM ONG				/ /	/			Numbe	Remarks/Special Instructions
WEANIWI-ZLO	WEA-MW-1	2/0/0	3 0930		S	X	X				-			4	
temperature blanks	WEA-MW-1	2/10/0	3 1130		W		,	X						1	5.8°C WWW RECEIPT
WEAMW4-25	WSA-MW-		1450		S	X	X							2	
WEA-ER-1	WEA-MW-J	i	1510		W	X								3	
								•							
															ي. من الم
					Ļ										4.3 bg
Relinquished by (signature) Aci U-K (sompany) Company Willefield	n Stes	2/10/03	2 Received by (s	ignature)) <u>(11)</u>	77 (0	ale 2/1	/ <u>'0 /</u> 3	13		Total Number of Containers
Company Wineficla	1 : Associates	Time 16 CO	Company	JE	/					J	ime Fla	σį			delivery of samples and the signature on Chain of Custody form constitutes
Relinquished by (signature)		Date	4 Received by La	aboratory (signa	ature)					ď	ale			autho	orization to perform the analyses specified e under the Terms and Conditions set
Company		Time	Company							Ti	me			forth	on the back hereof



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY REPORT

Client:

Client Address:

WINEFIELD & ASSOCIATES, INC.

110 Pine Ave., Suite 900

Long Beach, CA 90802

Report Date:

02/17/03

JEL Ref. No.:

C-0495

Attn:

Hector Garcia

Date Sampled:

02/11/03

Project:

Lynwood Springs

Date Received:

02/11/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Date Analyzed:

02/12/03

Physical State:

Soil/Water

ANALYSES REQUESTED

EPA 5035B/8260B- Volatile Organics by GC/MS + Oxygenates

Approval:

Steve Jones, Ph.D. Laboratory Manager



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

Drastical

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

02/17/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

C-0495

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled:

02/11/03

Project:

Date Received:

02/11/03

Lynwood Springs

Date Analyzed:

02/12/03

Project Address:

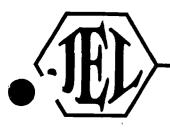
11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates WAAMWA

	W&AMW3	Practical	
Sample ID:	<u>-25</u>	Quantitation	<u>Units</u>
		<u>Limits</u>	
Analytes:			
Benzene	ND	2.0	ug/Kg
Bromodichloromethane	ND	2.0	ug/Kg
Bromoform	ND	2.0	ug/Kg
Bromomethane	ND	2.0	ug/Kg
n-Butylbenzene	ND	2.0	ug/Kg
sec-Butylbenzene	ND	2.0	ug/Kg
tert-Butylbenzene	ND	2.0	ug/Kg
Carbon tetrachloride	ND	2.0	ug/Kg
Chlorobenzene	ND	2.0	ug/Kg
Chloroethane	ND	2.0	ug/Kg
Chloroform	ND	2.0	ug/Kg
Chloromethane	ND	2.0	ug/Kg
2-Chlorotoluene	ND	2.0	ug/Kg
4-Chlorotoluene	ND	2.0	ug/Kg
Dibromochloromethane	ND	2.0	ug/K.g
1,2-Dibromo-3-chloropropane	ND	2.0	ug/Kg
1,2-Dibromoethane (EDB)	ND	2.0	ug/Kg
Dibromomethane	ND	2.0	ug/Kg
1,2- Dichlorobenzene	ND	. 2.0	ug/Kg
1,3-Dichlorobenzene	ND	2.0	ug/Kg
1,4-Dichlorobenzenc	ND	2.0	ug/Kg
Dichlorodifluoromethane	ND	2.0	ug/Kg
1,1-Dichloroethane	ND	2.0	ug/Kg
1,2-Dichloroethane	ND	2.0	ug/Kg
I,1-Dichloroethene	ND	2.0	ug/Kg
•	- :	2.0	-60



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

02/17/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

C-0495

Long Beach, CA 90802

Date Sampled:

02/11/03

Attn:

Hector Garcia

Date Received:

02/11/03

Project:

Lynwood Springs

Date Analyzed:

02/12/03

Project Address:

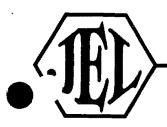
11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

Sample ID:	<u>W&AMW3</u> -25	O A y geniated	Practical Quantitation	<u>Units</u>
Analytes:		'	<u>Limits</u>	
cis-1,2-Dichloroethene	ND		2.0	ug/Kg
trans-1,2-Dichloroethene	ND		2.0	ug/Kg
1,2-Dichloropropane	ND		2.0	ug/Kg
1,3-Dichloropropane	ND		2.0	ug/Kg ug/Kg
2,2-Dichloropropane	ND		2.0	ug/Kg
1,1-Dichloropropene	ND		2.0	ug/Kg ug/Kg
cis-1,3-Dichloropropene	ND		2.0	ug/Kg ug/Kg
trans-1,3-Dichloropropene	ND		2.0	ug/Kg ug/Kg
Ethylbenzene	ND		2.0	ug/Kg ug/Kg
Hexachlorobutadiene	ND		2.0	ug/Kg
Isopropylbezene	ND		2.0	ug/Kg ug/Kg
4-Isopropyltoluene	ND ND		2.0	ug/Kg ug/Kg
Methylene chloride	ND		2.0	ug/Kg ug/Kg
Naphthalene	ND ND		2.0	ug/Kg ug/Kg
n-Propylbenzene	ND ND			
Styrene	ND ND		2.0	ug/Kg
1,1,1,2-Tetrachloroethane			2.0	ug/Kg
	ND		2.0	ug/Kg
1,1,2,2-Tetrachloroethane	ND		2.0	ug/Kg
Tetrachloroethylene	ND		2.0	ug/Kg
Toluene	ND		2.0	ug/Kg
1,2,3-Trichlorobenzene	ND		2.0	ug/Kg
1,2,4-Trichlorobenzene	ND		2.0	ug/Kg
1,1,1-Trichloroethane	ND		2.0	ug/Kg
1,1,2-Trichloroethane	ND		2.0	ug/Kg
Trichloroethylene	ND		2.0	ug/Kg



Testing Laboratories

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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

02/17/03

Client Address:

110 Pine Ave., Suite 900 Long Beach, CA 90802 JEL Ref. No.:

C-0495

Attn:

Hector Garcia

Date Sampled:

02/11/03

Project:

Lynwood Springs

Date Received: Date Analyzed:

02/11/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

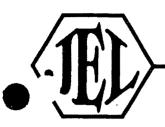
Physical State:

02/12/03 Soil

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

Sample ID:	<u>W&AMW3</u> <u>-25</u>		<u>Practical</u> Quantitation	Units
Sample 1D.	- L J	•	Limits	Onits
Analytes:				
Trichlorofluoromethane	ND		2.0	ug/Kg
1,2,3-Trichloropropane	ND		2.0	ug/Kg
1,2,4-Trimethylbenzene	ND		2.0	ug/Kg
1,3,5-Trimethylbenzene	ND		2.0	ug/Kg
Vinyl chloride	ND		2.0	ug/Kg
Xylenes	ND		2.0	ug/Kg
MTBE	ND		2.0	ug/Kg
Ethyl-tert-butylether	ND		2.0	ug/Kg
Di-ısopropylether	ND		2.0	ug/Kg
tert-amylmethylether	ND		2.0	ug/Kg
tert-Butylalcohol	ND		2.0	ug/Kg
Dilution Factor	1			
Surrogate Recovery:			QC Limits	
Dibromofluoromethane	100%		60 - 140	
Toluene-d ₈	107%		60 - 140	
4-Bromofluorobenzene	92%	,	60 - 140	

ND



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

OUALITY CONTROL INFORMATION

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

02/17/03

Client Address:

110 Pine Ave., Suite 900

C-0495

Long Beach, CA 90802

JEL Ref. No.:

Attn:

Hector Garcia

Date Sampled:

02/11/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 02/11/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

02/12/03 Soil

EPA 5035B/8260B- Volatile Organics by GC/MS

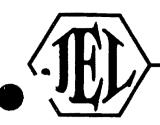
Sample Spiked: W&AMW3-25

<u>Parameter</u>	MS <u>Recovery (%)</u>	MSD Recovery (%)	RPD	Acceptability Range (%)
Benzene	101%	102%	1.9%	60 - 140
Chlorobenzene	96%	97%	1.3%	60 - 140
Toluene	100%	104%	3.7%	60 - 140
Trichloroethylene	92%	· 94%	2.2%	60 - 140
1,1-Dichloroethylene	94%	105%	11%	60 - 140

Method Blank = Not Detected

MS = Matrix Spike

MSD = Matrix Spike Duplicate RPD = Relative Percent Difference



Testing Laboratories

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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

02/17/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

C-0495

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled:

02/11/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 02/11/03

02/12/03

Project Address:

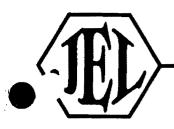
11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

		O A J G C I L C C C		
Sample ID:	<u>W&A-ER-</u> <u>2</u>	·.	<u>Practical</u> <u>Quantitation</u> <u>Limits</u>	Units
Analytes:				
Benzene	ND	•	0.5	ug/L
Bromodichloromethane	ND		0.5	ug/L
Bromoform	ND		0.5	ug/L
Bromomethane	ND		0.5	ug/L
n-Butylbenzene	ND		0.5	ug/L
sec-Butylbenzene	ND		0.5	ug/L
tert-Butylbenzene	ND		0.5	ug/L
Carbon tetrachloride	ND		0.5	ug/L
Chlorobenzene	ND		0.5	ug/L
Chloroethane	ND		0.5	ug/L
Chloroform	ND		0.5	ug/L
Chloromethane	ND		0.5	ug/L
2-Chlorotoluene	ND		0.5	ug/L
4-Chlorotoluene .	ND		0.5	ug/L
Dibromochloromethane	ND		0.5	ug/L
1,2-Dibromo-3-chloropropane	ND		0.5	ug/L
1,2-Dibromoethane (EDB)	ND		0.5	ug/L
Dibromomethane	ND		0.5	ug/L
1,2- Dichlorobenzene	ND .		0.5	ug/L
1,3-Dichlorobenzene	ND		0.5	ug/L
1,4-Dichlorobenzenc	ND		0.5	ug/L
Dichlorodifluoromethane	ND		0.5	ug/L
1,1-Dichloroethane	ND		0.5	ug/L
1,2-Dichloroethane	ND		0.5	ug/L
1,1-Dichloroethene	ND		0.5	ug/L
			~.~	- -



Testing Laboratories

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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

02/17/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

C-0495

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled:

02/11/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 02/11/03 02/12/03

Project Address:

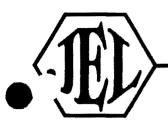
11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

	W&A-ER-	J., g	Practical	
Sample ID:	2	·	Quantitation	Units
-		•	<u>Limits</u>	-
Analytes:				
cis-1,2-Dichloroethene	ND		0.5	ug/L
trans-1,2-Dichloroethene	ND		0.5	ug/L
1,2-Dichloropropane	ND		0.5	ug/L
1,3-Dichloropropane	ND		0.5	ug/L
2,2-Dichloropropane	ND		0.5	ug/L
1,1-Dichloropropene	ND	,	0.5	ug/L
cis-1,3-Dichloropropene	ND		0.5	ug/L
trans-1,3-Dichloropropene	ND		0.5	ug/L
Ethylbenzene	ND		0.5	ug/L
Hexachlorobutadiene	ND		0.5	ug/L
Isopropylbezene	ND		0.5	ug/L
4-Isopropyltoluene	ND		0.5	ug/L
Methylene chloride	ND		0.5	ug/L
Naphthalene	ND		0.5	ug/L
n-Propylbenzene	ND		0.5	ug/L
Styrene	ND		0.5	ug/L
1,1,1,2-Tetrachloroethane	ND		0.5	ug/L
1,1,2,2-Tetrachloroethane	ND		0.5	ug/L
Tetrachloroethylene	ND		0.5	ug/L
Toluene	ND		0.5	ug/L
1,2,3-Trichlorobenzene	ND		0.5	ug/L
1,2,4-Trichlorobenzene	ND		0.5	ug/L
1,1,1-Trichloroethane	ND		0.5	ug/L
1,1,2-Trichloroethane	ND		0.5	ug/L
Trichloroethylene	ND		0.5	ug/L
-				-



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

02/17/03

Client Address:

110 Pine Ave., Suite 900 Long Beach, CA 90802

JEL Ref. No.:

C-0495

Attn:

Hector Garcia

Date Sampled:

02/11/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 02/11/03 02/12/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

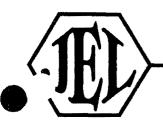
Physical State:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

Sample ID:	<u>W&A-ER-</u> <u>2</u>	Practical Quantitation Limits	<u>Units</u>
Analytes:			
Trichlorofluoromethane	ND	0.5	ug/L
1,2,3-Trichloropropane	ND	0.5	ug/L
1,2,4-Trimethylbenzene	ND	0.5	ug/L
1,3,5-Trimethylbenzene	· ND	0.5	ug/L
Vinyl chloride	ND	0.5	ug/L
Xylenes	ND	0.5	ug/L
MTBE	ND	0.5	ug/L
Ethyl-tert-butylether	ND	0.5	ug/L
Di-isopropylether	ND	0.5	ug/L
tert-amylmethylether	ND	0.5	ug/L
tert-Butylalcohol	ND	0.5	ug/L
Dilution Factor	i		
Surrogate Recovery:		QC Limits	
Dibromofluoromethane	97%	60 - 140	
Toluene-d ₈	106%	60 - 140	
4-Bromofluorobenzene	92%	60 - 140	

ND



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

QUALITY CONTROL INFORMATION

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

02/17/03

Client Address:

110 Pine Ave., Suite 900

C-0495

Long Beach, CA 90802

JEL Ref. No.:

Attn:

Hector Garcia

Date Sampled:

02/11/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 02/11/03 02/12/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS

Sample Spiked: W&A-ER-2

<u>Parameter</u>	MS <u>Recovery (%)</u>	MSD Recovery (%)	<u>RPD</u>	Acceptability Range (%)
Benzene	101%	98%	2.9%	60 - 140
Chlorobenzene	98%	101%	3.0%	60 - 140
Toluene	98%	105%	6.8%	60 - 140
Trichloroethylene	92%	96%	4.3%	60 - 140
1,1-Dichloroethylene	92%	97%	6.1%	60 - 140

Method Blank = Not Detected

MS

= Matrix Spike

MSD

= Matrix Spike Duplicate

RPD

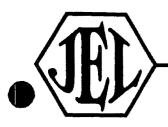
= Relative Percent Difference



P.O Box 5387 Fullerton, CA 92838 (714) 449-9937 Fax (714) 449-9685

Chain-of-Custody Record

Client [4] (124) 219	Assoc.	Date	1/03					/=	/		Ana	alysis i	Reque	eted	/	JEL Project #
Project Name	1,1200	Client Proje		•			/	San Source		/	/	/ /	/	/	///	(0495
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Project Address	Beach Alye	Turn Aroun	d Requested: nediate Attention 7	.mp •		/	/ જું જું/	(3)		/ 32/	/ /	/ /	/ /	/ /	' / /	Lab Use Only
Ly Myos & Co. Project Contact	^	Æ Rus	h 24-48 Hours ठुँ० ह h 72-96 Hours		<u>2</u> 5.	Sollife		Z/\	10/	<u> </u>						Sample Condition as Received.
Project Contact Mount Wing	27/2	Ø Non □ Mot	mal 人口 からら ille Lab	_	./	/ 👸 /	$\bigcirc/$	(0)	ST ST		$^{\prime}$ $/$	//	/ /	/ /	Remarks/	Chilled 🔾 yes 🔾 no Sealed 🔾 yes 🔾 no
Sample ID	Sample Location	Date	Time _.	Laboratory Sample Number	8		<i>y</i> 6	1	<i>5</i> /	/ ,	/ ,	/ ,		Numbe	Remarks/	Special Instructions
TEMPERATE Blank	2+1/4	2/11/0	30730		۲۷			X						1		IN URCOLIFT
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WFAMW3-1 WFAMW3-25	WLA-MW-3	#1	0920		3	X	X							4	EPA-5	735
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Relinquished by (signature)	erolam?	Date /11/03	2 Received by (s	ionaluroy	7	2				D	ate 2	lilo	3		Total Nun	nber of Containers
WINGFIELD IN	150c.	Time 1545	Company	JE						17	me	24!			delivery of samples	and the signature on orm constitutes
Relinquished by (signature)		Date	Received by La	aboratory (signa	iture)					D	ate			autho		the analyses specified
Company		Time	Company	***************************************						Ti	me			forth	on the back hereof	f.



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY REPORT

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/07/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

B-3670

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled:

03/03/03

Date Received:

03/04/03

Project:

Lynwood Springs

Date Analyzed:

03/04/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

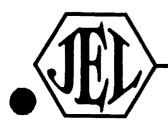
Soil/Water

ANALYSES REQUESTED

EPA 5035B/8260B- Volatile Organics by GC/MS + Oxygenates

Approval:

Steve Jones, Ph.D. Laboratory Manager



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/07/03

Client Address:

110 Pine Ave., Suite 900

B-3670

Long Beach, CA 90802

JEL Ref. No.:

Attn:

Hector Garcia

Date Sampled:

03/03/03

Date Received:

03/04/03

Project:

Lynwood Springs

Date Analyzed:

03/04/03

Project Address:

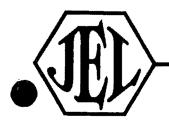
11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS &

			Oxygenat	tes			
Sample ID:	<u>W & A</u> MW2-20.5	W & A SB3-6'	W & A SB3-11'	<u>W & A</u> SB3-26'	<u>W & A</u> SB4-11'	Practical Quantitation Limits	<u>Units</u>
Analytes:							
Benzene	ND	180	130	53900	19	2.0	ug/Kg
Bromodichloromethane	ND	ND	ND	ND	ND	2.0	ug/Kg
Bromoform	ND	ND	ND	ND	ND	2.0	ug/Kg
Bromomethane	ND	ND	ND	ND	ND	2.0	ug/Kg
n-Butylbenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
sec-Butylbenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
tert-Butylbenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
Carbon tetrachloride	ND	ND	ND	ND	ND	2.0	ug/Kg
Chlorobenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
Chloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
Chloroform	ND	ND	ND	ND	ND	2.0	ug/Kg
Chloromethane	ND	ND	ND	ND	ND	2.0	ug/Kg
2-Chlorotoluene	ND	ND	ND	ND	ND	2.0	ug/Kg
4-Chlorotoluene	ND	ND	ND	ND	ND	2.0	ug/Kg
Dibromochloromethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	2.0	ug/Kg
Dibromomethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,4-Dichlorobenzenc	ND	ND	ND	ND	ND	2.0	ug/Kg
Dichlorodifluoromethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1-Dichloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2-Dichloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1-Dichloroethene	ND	ND	ND	ND	ND	2.0	ug/Kg



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/07/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

B-3670

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled:

03/03/03

Project:

Lynwood Springs

Date Received:

03/04/03

Date Analyzed:

03/04/03

Project Address:

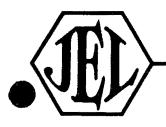
11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

Sample ID:	<u>W & A</u> MW2-20.5	W & A SB3-6'	<u>W & A</u> SB3-11'	<u>W & A</u> SB3-26'	<u>W & A</u> SB4-11'	Practical Quantitation Limits	<u>Units</u>
Analytes:					٠.	Limits	
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	2.0	ug/Kg
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2-Dichloropropane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,3-Dichloropropane	ND	ND	ND	ND	ND	2.0	ug/Kg
2,2-Dichloropropane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1-Dichloropropene	ND	ND	ND	ND	ND	2.0	ug/Kg
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	2.0	ug/Kg
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	2.0	ug/Kg
Ethylbenzene	ND	39	ND	57700	2.0	2.0	ug/Kg
Hexachlorobutadiene	ND	ND	ND	ND	ND	2.0	ug/Kg
Isopropylbezene	ND	ND	ND	2300	ND	2.0	ug/Kg
4-Isopropyltoluene	ND	ND	ND	1400	ND	2.0	ug/Kg
Methylene chloride	ND	ND	ND	ND	ND	2.0	ug/Kg
Naphthalene	ND	36	ND	5100	ND	2.0	ug/Kg
n-Propylbenzene	ND	30	33	14300	ND	2.0	ug/Kg
Styrene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
Tetrachloroethylene	ND	ND	ND	5800	490	2.0	ug/Kg
Toluene	ND	370	230	20800*	ND	2.0	ug/Kg
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
Trichloroethylene	ND	ND	ND	ND	46	2.0	ug/Kg



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/07/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

Long Beach, CA 90802

B-3670

Attn:

Hector Garcia

Date Sampled:

03/03/03

Project:

Lynwood Springs

Date Received:

03/04/03

Date Analyzed:

03/04/03

Project Address:

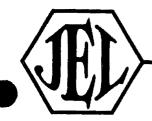
11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS &

	Oxygenates							
Sample ID:	<u>W & A</u> MW2-20.5	W & A SB3-6'	<u>W & A</u> SB3-11'	<u>W & A</u> SB3-26'	<u>W & A</u> SB4-11'	Practical Quantitation Limits	Units	
Analytes:								
Trichlorofluoromethane	ND	ND	ND	ND	ND	2.0	ug/Kg	
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	2.0	ug/Kg	
1,2,4-Trimethylbenzene	ND	270	180	103000	ND	2.0	ug/Kg	
1,3,5-Trimethylbenzene	ND	270	180	103000	ND	2.0	ug/Kg	
Vinyl chloride	ND	ND'	ND	ND	ND	2.0	ug/Kg	
Xylenes	ND	460	190	187000	ND	2.0	ug/Kg	
MTBE	ND	37000*	32300*	ND	ND	2.0	ug/Kg	
Ethyl-tert-butylether	ND	ND	ND	ND	ND	2.0	ug/Kg	
Di-1sopropylether	ND	ND	ND	ND	ND	2.0	ug/Kg	
tert-amylmethylether	ND	ND	ND	ND	ND	2.0	ug/Kg	
tert-Butylalcohol	ND	ND	ND	ND	ND	2.0	ug/Kg	
Dilution Factor	1	1	1/200*	400	1			
Surrogate Recovery:						QC Limits		
Dibromofluoromethane	107%	81%	79%	76%	84%	60 - 140		
Toluene-d ₈	105%	107%	106%	116%	107%	60 - 140		
4-Bromofluorobenzene	97%	98%	91%	97%	84%	60 - 140		



Testing Laboratories

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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/07/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

B-3670

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled:

03/03/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 03/04/03 03/04/03

Project Address:

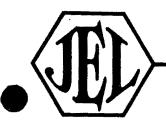
11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

			Oxygenates		
Sample ID:	<u>W & A</u> SB4-21'	W & A SB4-26'		Practical Quantitation Limits	<u>Units</u>
Analytes:					
Benzene	100	2300*		2.0	ug/Kg
Bromodichloromethane	ND	ND		2.0	ug/Kg
Bromoform	ND	ND		2.0	ug/Kg
Bromomethane	ND	ND		2.0	ug/Kg
n-Butylbenzene	ND	ND		2.0	ug/Kg
sec-Butylbenzene	ND	ND		2.0	ug/Kg
tert-Butylbenzene	ND	ND		2.0	ug/Kg
Carbon tetrachloride	ND	ND		2.0	ug/Kg
Chlorobenzene	ND	ND		2.0	ug/Kg
Chloroethane	ND	ND		2.0	ug/Kg
Chloroform	ND	ND		2.0	ug/Kg
Chloromethane	ND	ND		2.0	ug/Kg
2-Chlorotoluene	ND	ND		2.0	ug/Kg
4-Chlorotoluene	ND	ND		2.0	ug/Kg
Dibromochloromethane	ND	ND		2.0	ug/Kg
1,2-Dibromo-3-chloropropane	ND	ND		2.0	ug/Kg
1,2-Dibromoethane (EDB)	ND	ND	•	2.0	ug/Kg
Dibromomethane	ND	ND		2.0	ug/Kg
1,2- Dichlorobenzene	ND	ND		2.0	ug/Kg
1,3-Dichlorobenzene	ND	ND		2.0	ug/Kg
1,4-Dichlorobenzenc	ND	ND	•	2.0	ug/Kg
Dichlorodifluoromethane	ND	ND		2.0	ug/Kg
1,1-Dichloroethane	ND	ND		2.0	ug/Kg
1,2-Dichloroethane	ND	ND		2.0	ug/Kg
1,1-Dichloroethene	ND	ND		2.0	ug/Kg
					0



Testing Laboratories

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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/07/03

Client Address:

110 Pine Ave., Suite 900

B-3670

Long Beach, CA 90802

JEL Ref. No.:

Attn:

Hector Garcia

Date Sampled:

03/03/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 03/04/03

Project Address:

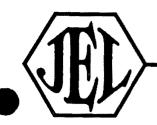
11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

03/04/03 Soil

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

	<u>W & A</u>	<u> W & A</u>	<u>Practical</u>	
Sample ID:	<u>SB4-21'</u>	SB4-26'	Quantitation	<u>Units</u>
			<u>Limits</u>	
Analytes:				
cis-1,2-Dichloroethene	ND	ND	2.0	ug/Kg
trans-1,2-Dichloroethene	ND	ND	2.0	ug/Kg
1,2-Dichloropropane	ND	ND	2.0	ug/Kg
1,3-Dichloropropane	ND	ND	2.0	ug/Kg
2,2-Dichloropropane	ND	ND	2.0	ug/Kg
1,1-Dichloropropene	ND	ND	2.0	ug/Kg
cis-1,3-Dichloropropene	ND	ND	2.0	ug/Kg
trans-1,3-Dichloropropene	ND	ND	2.0	ug/Kg
Ethylbenzene	58	120	2.0	ug/Kg
Hexachlorobutadiene	ND	ND	2.0	ug/Kg
Isopropyibezene	ND	ND	2.0	ug/Kg
4-Isopropyltoluene	ND	ND	2.0	ug/Kg
Methylene chloride	ND	ND	2.0	ug/Kg
Naphthalene	ND	17	2.0	ug/Kg
n-Propylbenzene	20	29	2.0	ug/Kg
Styrene	ND	ND	2.0	ug/Kg
1,1,1,2-Tetrachloroethane	ND	ND	2.0	ug/Kg
1,1,2,2-Tetrachloroethane	ND	ND	2.0	ug/Kg
Tetrachloroethylene	200	51	2.0	ug/Kg
Toluene	170	3000*	2.0	ug/Kg
1,2,3-Trichlorobenzene	ND	ND	2.0	ug/Kg
1,2,4-Trichlorobenzene	ND	ND	2.0	ug/Kg
1,1,1-Trichloroethane	ND	ND	2.0	ug/Kg
1,1,2-Trichloroethane	ND	ND	2.0	ug/Kg
Trichloroethylene	35	13	2.0	ug/Kg



Testing Laboratories

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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/07/03

Client Address:

110 Pine Ave., Suite 900 Long Beach, CA 90802

JEL Ref. No.:

B-3670

Attn:

Hector Garcia

Date Sampled:

03/03/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 03/04/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

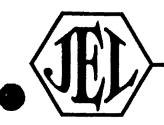
03/04/03

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

Sample ID:	<u>W & A</u> SB4-21'	<u>W & A</u> SB4-26'	<u>Practical</u> <u>Quantitation</u> <u>Units</u> <u>Limits</u>
Analytes:			
Trichlorofluoromethane	ND	ND	2.0 ug/Kg
1,2,3-Trichloropropane	ND	ND	2.0 ug/Kg
1,2,4-Trimethylbenzene	43	180	2.0 ug/Kg
1,3,5-Trimethylbenzene	43	180	2.0 ug/Kg
Vinyl chloride	ND	ND	2.0 ug/Kg
Xylenes	120	810	2.0 ug/Kg
MTBE	ND	240	2.0 ug/Kg
Ethyl-tert-butylether	ND	ND	2.0 ug/Kg
Di-isopropylether	ND	ND	2.0 ug/Kg
tert-amylmethylether	ND	ND	2.0 ug/Kg
tert-Butylalcohol	ND	ND	2.0 ug/Kg
Dilution Factor	1	1/100*	
Surrogate Recovery:			. QC Limits
Dibromofluoromethane	85%	80%	60 - 140
Toluene-d ₈	104%	106%	60 - 140
4-Bromofluorobenzene	95%	96%	60 - 140

ND



Testing Laboratories

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JONES ENVIRONMENTAL

QUALITY CONTROL INFORMATION

Client: Client Address: WINEFIELD & ASSOCIATES, INC.

110 Pine Ave., Suite 900

Long Beach, CA 90802

Report Date:

03/07/03

JEL Ref. No.:

B-3670

Date Sampled:

03/03/03

Project:

Attn:

Lynwood Springs

Hector Garcia

Date Received: Date Analyzed: 03/04/03

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

03/04/03

Project Address:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS

Sample Spiked: CLEAN SOIL

<u>Parameter</u>	MS <u>Recovery (%)</u>	MSD Recovery (%)	RPD	Acceptability Range (%)
Benzene	96%	95%	1.3%	60 - 140
Chlorobenzene	90%	89%	0.9%	60 - 140
Toluene	89%	95%	3.7%	60 - 140
Trichloroethylene	87%	87%	0.5%	60 - 140
1,1-Dichloroethylene	78%	73%	6.6%	60 - 140

Sample Spiked: CLEAN SOIL

<u>Parameter</u>	MS Recovery (%)	MSD Recovery (%)	RPD	Acceptability Range (%)
Benzene	87%	89%	2.2%	60 - 140
Chlorobenzene	86%	92%	7.4%	60 - 140
Toluene	91%	97%	5.9%	60 - 140
Trichloroethylene	97%	97%	0.1%	60 - 140
1,1-Dichloroethylene	88%	92%	4.5%	60 - 140

Method Blank = Not Detected

MS = Matrix Spike

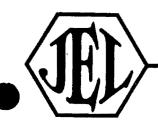
MSD = Matrix Spike Duplicate = Relative Percent Difference RPD



P.O. Box 5387 Fullerton, CA 92838 (714) 449-9937 Fax (714) 449-9685

Chain-of-Custody Record

Client Winestiels) \$ A550C/n	Date 3/	3/02				/3	/	in	Ana	alysis F	Reque	sted	/ /	JEL Project #
Project Name	Socious	Client Projec				/	one ous	/ 					/	/.///	K3670
Project Address 11605 Loing	Ready Will	Turn Around	Requested:	つしぐ マーレ ハレノオ		Shugge (S.)	(2) (4) Aqueous (4)	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		12/1	//	/	//	////	Page / Of /
Project Contact AA		Rush Norm	24-48 Hours Size 72-96 Hours al All other	thalysel	Sample Matri	30/1/3		1			/ ,	/	/ /	Remarks/S	Sample Condition as Received Chilled 2 yes a no
MATE	winefield	☐ Mobil	e Lab	.	Malr:			3		\ /				\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	Sealed ☑ yes ☐ no
Sample ID	Sample Location	Date	Time	Laboratory Sample Number	Sample	₹ \ \t		1/1	<u>Z</u>	\angle		/	Numb	Remarks/S	Special Instructions
WEAMWZ-ZO.	FWEA-MW-Z	3/3/03	30835	1 1	2/2	$\langle \chi$							4		
NEASE3-1	WFA-58-3	a.	1235		5	X							1		
WASE3- 6	11	11	1315		5 X		X						4		
W\$ASB3-11	11 js }.	,	1320		$\leq \rangle$	(X						4		
WEASES- 26	11 15 15 A	١.	1350		5 >	$\langle X$							4		
WEASE 4-11	WEA-JB-4	٠,	1540										3	,	
MEASP4-21	12 1		1619	,	5>	$\langle \rangle$							4		
WEASEA-7-6	is now		1610		5>	<							3.		
remperature Blu	ok N/A	3/3/0	3 0600		N			X					1	27°C	
Relinquished by (signature)	VI)	Date	Preceived by (s	ignature)	_				1	Date Z/L	1/0	3		Total Num	ber of Containers
Company MY:/1/V.			Company TF						1	Time	3,5			delivery of samples Chain of Custody for	and the signature on
Relinquished by (signature)		Date	4 Received by La	iboratory (signatu	e)					Date			autho abov	orization to perform e under the Terms a	the analyses specified and Conditions set
Company		Time	Company				~~ <u>~~</u>		1	ime			forth	on the back hereof.	



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY REPORT

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/07/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

B-3671

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled:

03/03/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 03/04/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

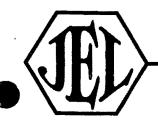
03/04/03 Soil/Water

ANALYSES REQUESTED

EPA 5035B/8260B- Volatile Organics by GC/MS + Oxygenates

Approval:

Steve Jones, Ph.D. Laboratory Manager



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/07/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

B-3671

Long Beach, CA 90802

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Attn:

Hector Garcia

Date Sampled:

03/03/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 03/04/03 03/04/03

Project Address:

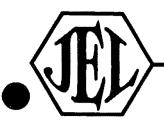
11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

Sample ID:	W & A SB2-6.5	W & A SB2-11.5'	W & A SB2-26.5'	<u>W & A</u> SB2-26.5D	W & A HVW2- 22'	Practical Quantitation Limits	<u>Units</u>
Analytes:	NID	170	74000	41000	****	2.0	
Benzene Bromodichloromethane	ND	120	74000	41000	27000	2.0	ug/Kg
Bromodichioromethane	ND	ND	ND	ND	ND	2.0	ug/Kg
	ND	ND	ND	ND	ND	2.0	ug/Kg
Bromomethane	ND	ND	ND	ND	ND	2.0	ug/Kg
n-Butylbenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
sec-Butylbenzene	ND	ND	ND	ND	320	2.0	ug/Kg
tert-Butylbenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
Carbon tetrachloride	ND	ND	ND	ND	ND	2.0	ug/Kg
Chlorobenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
Chloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
Chloroform	ND	ND	ND	ND	ND	2.0	ug/Kg
Chloromethane	ND	ND	ND	ND	ND	2.0	ug/Kg
2-Chlorotoluene	ND	ND	ND	ND	ND	2.0	ug/Kg
4-Chlorotoluene	ND	ND	ND	ND	ND	2.0	ug/Kg
Dibromochloromethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	2.0	ug/Kg
Dibromomethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,4-Dichlorobenzenc	ND	ND	ND	ND	ND	2.0	ug/Kg
Dichlorodifluoromethane	ND	ND	ND	ND	ND	2.0	ug/K.g
1,1-Dichloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2-Dichloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1-Dichloroethene	ND	ND	ИD	ND	ND	2.0	ug/Kg



Testing Laboratories

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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/07/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

B-3671

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled:

03/03/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 03/04/03

Project Address:

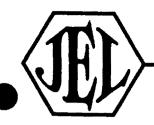
11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

03/04/03 Soil

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

Sample ID:	<u>W & A</u> SB2-6.5	<u>W & A</u> SB2-11.5'	W & A SB2-26.5'	<u>W & A</u> SB2-26.5D	W & A HVW2- 22'	Practical Quantitation Limits	Units
Analytes:			h				
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	2.0	ug/Kg
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2-Dichloropropane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,3-Dichloropropane	ND	ND	ND	ND	ND	2.0	ug/Kg
2,2-Dichloropropane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1-Dichloropropene	ND	ND	ND	ND	ND	2.0	ug/Kg
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	2.0	ug/Kg
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	2.0	ug/Kg
Ethylbenzene	ND	ND	11300	60000	13000	2.0	ug/Kg
Hexachlorobutadiene	ND	ND	ND	ND	ND	2.0	ug/Kg
Isopropylbezene	ND	ND	1700J	ND	2500	2.0	ug/Kg
4-Isopropyltoluene	ND	ND	ND	ND	1500	2.0	ug/Kg
Methylene chloride	ND	ND	ND	ND	ND	2.0	ug/Kg
Naphthalene	ND	ND	16000	7100	6700	2.0	ug/Kg
n-Propylbenzene	ND	13	35000	22000	11500	2.0	ug/Kg
Styrene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
Tetrachloroethylene	6.6	36	104000	53900	ND	2.0	ug/Kg
Toluene	ND	2.0	443000	245000	357000*	2.0	ug/Kg
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
Trichloroethylene	ND	7.5	ND	ND	ND	2.0	ug/Kg



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date: -

03/07/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

B-3671

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled:

03/03/03

Date Received:

03/04/03

Project:

Lynwood Springs

Date Analyzed:

03/04/03

Project Address:

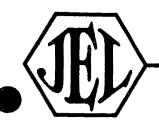
11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS &

			Oxygena	tes			
Sample ID:	W & A SB2-6.5	<u>W & A</u> SB2-11.5'	W & A SB2-26.5'	<u>W & A</u> SB2-26.5D	<u>W & A</u> <u>HVW2-</u> <u>22'</u>	Practical Quantitation Limits	<u>Units</u>
Analytes:							
Trichlorofluoromethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2,4-Trimethylbenzene	ND	25	240000	136000	189000*	2.0	ug/Kg
1,3,5-Trimethylbenzene	ND	25	240000	136000	189000*	2.0	ug/Kg
Vinyl chloride	ND	ND	ND	ND	ND	2.0	ug/Kg
Xylenes	ND	93	404000	227000	330000*	2.0	ug/Kg
MTBE	ND	4600*	307000	240000	445000*	2.0	ug/Kg
Ethyl-tert-butylether	ND	ND	ND	ND	ND	2.0	ug/Kg
Di-isopropylether	ND	ND	ND	ND	ND	· 2.0	ug/K g
tert-amylmethylether	ND	ND	ND	ND	ND	2.0	ug/K g
tert-Butylalcohol	ND	ND	ND	ND	ND	2.0	ug/Kg
Dilution Factor	1	1/100*	1000	1000	200/1000*		
Surrogate Recovery:						QC Limits	
Dibromofluoromethane	105%	80%	82%	82%	70%	60 - 140	
Toluene-d ₈	101%	106%	116%	110%	118%	60 - 140	
4-Bromofluorobenzene	99%	97%	97%	99%	101%	60 - 140	



Testing Laboratories

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JONES ENVIRONMENTAL

QUALITY CONTROL INFORMATION

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/07/03

Client Address:

110 Pine Ave., Suite 900

B-3671

Long Beach, CA 90802

JEL Ref. No.:

Attn:

Hector Garcia

Date Sampled:

03/03/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 03/04/03 03/04/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS

Sample Spiked: CLEAN SOIL

	MS	MSD		Acceptability
<u>Parameter</u>	Recovery (%)	Recovery (%)	<u>RPD</u>	Range (%)
Benzene	87%	89%	2.2%	60 - 140
Chlorobenzene	86%	92%	7.4%	60 - 140
Toluene	91%	97%	5.9%	60 - 140
Trichloroethylene	97%	97%	0.1%	60 - 140
1,1-Dichloroethylene	88%	92%	4.5%	60 - 140

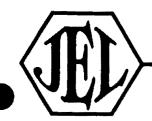
Sample Spiked: CLEAN SOIL

Parameter	MS Recovery (%)	MSD Recovery (%)	<u>RPD</u>	Acceptability Range (%)
Benzene	96%	95%	1.3%	60 - 140
Chlorobenzene	90%	89%	0.9%	60 - 140
Toluene	89%	85%	3.7%	60 - 140
Trichloroethylene	87%	87%	0.5%	60 - 140
1,1-Dichloroethylene	78%	73%	6.6%	60 - 140

Method Blank = Not Detected

MS = Matrix Spike

MSD = Matrix Spike Duplicate RPD = Relative Percent Difference



Testing Laboratories

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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/07/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

B-3671

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled:

03/03/03

Project:

Lynwood Springs

Date Received:

03/04/03

Project Address:

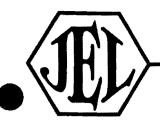
11600 S. Long Beach Blvd., Lynwood, CA

Date Analyzed: Physical State:

03/04/03 Water

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

		Oxy 5 chates		
Sample ID:	W & A- ER-3		Practical Quantitation Limits	<u>Units</u>
Analytes:				
Benzene	ND	•	0.5	ug/L
Bromodichloromethane	ND		0.5	ug/L
Bromoform	ND		0.5	ug/L
Bromomethane	ND		0.5	ug/L
n-Butylbenzene	ND		0.5	ug/L
sec-Butylbenzene	ND		0.5	ug/L
tert-Butylbenzene	ND		0.5	ug/L
Carbon tetrachloride	ND		0.5	ug/L
Chlorobenzene	ND		0.5	ug/L
Chloroethane	ND		0.5	ug/L
Chloroform	ND		0.5	ug/L
Chloromethane	ND		0.5	ug/L
2-Chlorotoluene	ND		0.5	ug/L
4-Chlorotoluene	ND		0.5	ug/L
Dibromochloromethane	ND		0.5	ug/L
1,2-Dibromo-3-chloropropane	ND		0.5	ug/L
1,2-Dibromoethane (EDB)	ND		0.5	ug/L
Dibromomethane	ND		0.5	ug/L
1,2- Dichlorobenzene	ND		0.5	ug/L
1,3-Dichlorobenzene	ND		0.5	ug/L
1,4-Dichlorobenzenc	ND	•	0.5	ug/L
Dichlorodifluoromethane	ND		0.5	ug/L
1,1-Dichloroethane	ND		0.5	ug/L
1,2-Dichloroethane	ND		0.5	ug/L
1,1-Dichloroethene	ND	•	0.5	ug/L



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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/07/03

Client Address:

110 Pine Ave., Suite 900 Long Beach, CA 90802

13/ P. A

JEL Ref. No.:

B-3671

Hector Garcia

Date Sampled:

03/03/03

Project:

Attn:

Lynwood Springs

Date Received: Date Analyzed:

03/04/03 03/04/03

Dractical

Project Address:

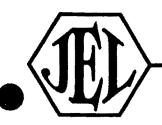
11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

	<u>W & A-</u>	<u>Practical</u>	
Sample ID:	<u>ER-3</u>	Quantitation	Units
		Limits	
Analytes:			
cis-1,2-Dichloroethene	ND	0.5	ug/L
trans-1,2-Dichloroethene	ND	0.5	ug/L
1,2-Dichloropropane	ND	0.5	ug/L
1,3-Dichloropropane	ND	0.5	ug/L
2,2-Dichloropropane	ND	. 0.5	ug/L
I,I-Dichloropropene	ND	0.5	ug/L
cis-1,3-Dichloropropene	ND	0.5	ug/L
trans-1,3-Dichloropropene	ND	0.5	ug/L
Ethylbenzene	ND	0.5	ug/L
Hexachlorobutadiene	ND	0.5	ug/L
Isopropylbezene	ND	0.5	ug/L
4-Isopropyltoluene	ND .	0.5	ug/L
Methylene chloride	ND	0.5	ug/L
Naphthalene	ND	0.5	ug/L
n-Propylbenzene	ND	0.5	ug/L
Styrene	ND	0.5	ug/L
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L
Tetrachloroethylene	ND	0.5	ug/L
Toluene	ND	0.5	ug/L
1,2,3-Trichlorobenzene	ND	0.5	ug/L
1,2,4-Trichlorobenzene	ND	0.5	ug/L
1,1,1-Trichloroethane	ND	0.5	ug/L
1,1,2-Trichloroethane	ND	0.5	ug/L
Trichloroethylene	ND		
· · · · · · · · · · · · · · · · · · ·	עאו	0.5	ug/L



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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/07/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

B-3671

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled:

03/03/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 03/04/03 03/04/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

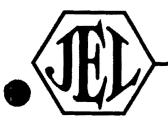
Physical State:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

Sample ID:	W & A- ER-3	<u>Practical</u> <u>Quantitation</u> <u>Limits</u>	<u>Units</u>
Analytes:			
Trichlorofluoromethane	ND	0.5	ug/L
1,2,3-Trichloropropane	ND	0.5	ug/L
1,2,4-Trimethylbenzene	ND	0.5	ug/L
1,3,5-Trimethylbenzene	ND	0.5 .	ug/L
Vinyl chloride	ND	0.5	ug/L
Xylenes	ND	0.5	ug/L
MTBE	ND	0.5	ug/L
Ethyl-tert-butylether	ND	0.5	ug/L
Di-isopropylether	ND	0.5	ug/L
tert-amylmethylether	ND	0.5	ug/L
tert-Butylalcohol	ND	0.5	ug/L
Dilution Factor	1		
Surrogate Recovery:		QC Limits	
Dibromofluoromethane	103%	60 - 140	
Toluene-d ₈	103%	60 - 140	
4-Bromofluorobenzene	100%	60 - 140	

ND



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JONES ENVIRONMENTAL

QUALITY CONTROL INFORMATION

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/07/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

B-3671

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled:

03/03/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 03/04/03

03/04/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS

Sample Spiked: EQUIPMENT BLANK

<u>Parameter</u>	MS <u>Recovery (%)</u>	MSD <u>Recovery (%)</u>	RPD	Acceptability Range (%)
Benzene	97%	88%	9.4%	60 - 140
Chlorobenzene	107%	106%	0.1%	60 - 140
Toluene	100%	99%	1.2%	60 - 140
Trichloroethylene	101%	105%	3.6%	60 - 140
1,1-Dichloroethylene	86%	86%	0.0%	60 - 140

Method Blank = Not Detected

MS = Matrix Spike

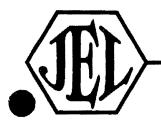
= Matrix Spike Duplicate MSD RPD = Relative Percent Difference



P.O. Box 5387 Fullerton, CA 92838 (714) 449-9937 Fax (714) 449-9685

Chain-of-Custody Record

Project Name Lynwood Sf Project Address II (p()) Long E Lynwood, C Project Contact Project Contact	peach Blud.	Turn	Around I Immed Rush 2	- OOT/ Requested: diate Attention +e 24-48 Hours 820 72-96 Hours	mp 60B	/	Matrix Soil (S	10 R	800	//	Ana	alysis F	Reque	//	o Containers	//	Page / Lab Use C Sample as Rece Chilled	of /
Sample ID	Sample Location		Date	Time	Laboratory Sample Number	Sam		1/0	%	/	/ /			Number	Re	marks/S	Special Inst	ructions
WEASB2-2.5	WEA-SB-Z	3/3	103	1120	B3671-1	2	X											
WEASB2-6.5	U			1135	137271-2	2		X						3				
WEASB2-11.5	ζ,			1140	1337.1-3	2		X						<u>ത</u>				
WKASB2-26	\1			1210	183671-4	S	X											
WASB2-26.5	II			1210	13671-5	2		X						3				
WEASB2-265D	(1			121c	137671-6	S		X						3				
WEASB2-36	î ţ			1240	183671-7	S								-	He	LD		
W7ASB2-36,5	(ı			1240	157671-8	S								3	Ho	<u>slD</u>		
WEAHVW2-ZZ				1510	V3871-9	S		X						3				
NEA-ER-3	WEA-HVW-Z			1600	43671-10	W	Х.	X	1/-					5				
Relinquished by (signature)	M)	Date /	2.2	Received by (si	ignature)	511	سير ل			D	ale 74	/a=	z,		1	fotal Num	ber of Conta	iners
Company ////////////////////////////////////	n C -	Time	Y	Company	. 5					T	ime ノス		_				and the sign	
Relinquished by (signature)		Date	•	Received by La	aboratony (signa	lure)				D	ate			above	e under the	Terms a	the analyse nd Conditio	
Company		Time	(Company						 Ti	ime			torth	on the bac	k nereof.		•



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY REPORT

Client:

WINEFIELD & ASSOCIATES, INC.

Client Address:

110 Pine Ave., Suite 900

Long Beach, CA 90802

Report Date:

03/11/03

JEL Ref. No.:

B-3679

Attn:

Hector Garcia

Date Sampled:

03/04/03

Project:

Lynwood Springs

Date Received:

03/04/03

Project.

Lynwood Springs

Date Analyzed:

03/06/03 & 03/09/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil/Water

ANALYSES REQUESTED

1. EPA 5035B/8260B- Volatile Organics by GC/MS + Oxygenates

Approval:

Steve Jones, Ph.D. Laboratory Manager



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client: Client Address: WINEFIELD & ASSOCIATES, INC.

110 Pine Ave., Suite 900

Long Beach, CA 90802

Report Date:

03/11/03

JEL Ref. No.:

· B-3679

Attn:

Hector Garcia

Date Sampled:

03/04/03

Date Received:

03/04/03

Project:

Lynwood Springs

Date Analyzed:

03/06/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

			Oxygena	tes			
Sample ID:	W & A BS1- 5.5'	W & A SB1- 10.5'	W & A SB1- 20.5'	W & A SB1- 25.5'	W & A SB1- 25.5D	Practical Quantitation Limits	<u>Units</u>
Analytes:							
Benzene	ND	ND	12000	20000	15000	2.0	ug/Kg
Bromodichloromethane	ND	ND	ND	ND	ND	2.0	ug/Kg
Bromoform	ND	ND	ND	ND	ND	2.0	ug/Kg
Bromomethane	ND	ND	ND	ND	ND	2.0	ug/Kg
n-Butylbenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
sec-Butylbenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
tert-Butylbenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
Carbon tetrachloride	ND	ND	ND	ND	ND	2.0	ug/Kg
Chlorobenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
Chloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
Chloroform	ND	ND	ND	ND	ND	2.0	ug/Kg
Chloromethane	ND	ND	ND	ND	ND	2.0	ug/Kg
2-Chlorotoluene	ND	ND	ND	ND	ND	2.0	ug/Kg
4-Chlorotoluene	ND	ND	ND	ND	ND	2.0	ug/Kg
Dibromochloromethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	2.0	ug/Kg
Dibromomethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2- Dichlorobenzene	ND	ND	ND	ND .	ND	2.0	ug/Kg
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,4-Dichlorobenzenc	ND	ND	ND	ND	ND	2.0	ug/Kg
Dichlorodifluoromethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1-Dichloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2-Dichloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1-Dichloroethene	ND	ND	ND	ND	ND	2.0	ug/Kg



Testing Laboratories

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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Client Address: 110 Pine Ave., Suite 900

Long Beach, CA 90802

Report Date:

03/11/03

JEL Ref. No.:

B-3679

Attn:

Hector Garcia

Date Sampled:

03/04/03

Project:

Lynwood Springs

Date Received: Date Analyzed:

03/04/03 03/06/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil

3011

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

			Oxygena	ics			
	<u>W & A</u>	<u>W & A</u>	<u>W & A</u>	<u>W & A</u>	<u> W & A</u>	Practical	
Sample ID:	BS1-	<u>SB1-</u>	<u>SB1-</u>	<u>SB1-</u>	<u>SB1-</u>	Quantitation	Units
	<u>5.5°</u>	<u>10.5°</u>	20.51	<u>25.5°</u>	25.5D	<u>Limits</u>	
Analytes:							
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	2.0	ug/Kg
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2-Dichloropropane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,3-Dichloropropane	ND	ND	ND	ND	ND	2.0	ug/Kg
2,2-Dichloropropane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1-Dichloropropene	ND	ND	ND	ND	ND	2.0	ug/Kg
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	2.0	ug/Kg
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	2.0	ug/Kg
Ethylbenzene	ND	ND	6000	22000	16000	2.0	ug/Kg
Hexachlorobutadiene	ND	ND	ND	ND	ND	2.0	ug/Kg
Isopropylbezene	ND	ND	240	ND	ND	2.0	ug/Kg
4-Isopropyltoluene	ND	ND	76	ND	· ND	2.0	ug/Kg
Methylene chloride	ND	ND	ND	ND	ND	2.0	ug/Kg
Naphthalene	ND	ND	ND	2200	890	2.0	ug/Kg
n-Propylbenzene	ND	ND	20000	26000	18000	2.0	ug/Kg
Styrene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
Tetrachlorocthylene	44	13	ND	ND	ND	2.0	ug/Kg
Toluene	ND	ND	54000	94000	72000	2.0	ug/Kg
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
Trichloroethylene	ND	ND	ND	ND	ND	2.0	ug/Kg
					. –		U



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client: Client Address: WINEFIELD & ASSOCIATES, INC.

110 Pine Ave., Suite 900

Long Beach, CA 90802

Report Date:

03/11/03

JEL Ref. No.:

B-3679

Attn:

Hector Garcia

Date Sampled:

03/04/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 03/04/03

03/06/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS &

			Охудепа	tes			
	<u>W & A</u>	<u>W & A</u>	<u>W & A</u>	<u>W & A</u>	<u>W & A</u>	Practical	
Sample ID:	<u>BS1-</u>	<u>SB1-</u>	<u>SB1-</u>	<u>SB1-</u>	<u>SB1-</u>	Quantitation	Units
	<u>5.5°</u>	10.5	<u>20.5°</u>	<u>25.5'</u>	<u>25.5D</u>	<u>Limits</u>	
Analytes:					•		
Trichlorofluoromethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2,4-Trimethylbenzene	ND	ND	52500	71800	79900	2.0	ug/Kg
1,3,5-Trimethylbenzene	ND	ND	20900	33600	38700	2.0	ug/Kg
Vinyl chloride	ND	ND	ND	ND	ND	2.0	ug/Kg
Xylenes	ND	ND	25000	55000	44000	2.0	ug/Kg
MTBE	ND	110	620000	540000	540000	2.0	ug/Kg
Ethyl-tert-butylether	ND	ND	ND	ND	ND	2.0	ug/Kg
Di-isopropylether	ND	ND	ND	ND	ND	2.0	ug/Kg
tert-amylmethylether	ND	ND	ND	ND	ND	2.0	ug/Kg
tert-Butylalcohol	ND	ND	ND	ND	ND	2.0	ug/Kg
Dilution Factor	1	50	410	520	360		
Surrogate Recovery:						QC Limits	
Dibromofluoromethane	101%	103%	85%	119%	131%	60 - 140	
Toluene-d ₈	97%	99%	102%	86%	87%	60 - 140	
4-Bromofluorobenzene	95%	99%	89%	82%	82%	60 - 140	

ND



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client: Client Address:

Attn:

WINEFIELD & ASSOCIATES, INC.

110 Pine Ave., Suite 900

Long Beach, CA 90802

Report Date:

03/11/03

JEL Ref. No.:

- B-3679

Hector Garcia

Date Sampled:

03/04/03

Date Received:

03/04/03

Project:

Lynwood Springs

Date Analyzed:

03/06/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

	<u>W & A</u>	<u>W & A</u>	<u> W & A</u>	<u>W & A</u>	<u>W & A</u>	<u>Practical</u>	
Sample ID:	<u>HVW1-</u>	<u> HVW1-</u>	<u> HVW1-</u>	<u> HVW3-</u>	HVW3-	<u>Ouantitation</u>	Units
	<u>6'</u>	<u>11'</u>	<u>23'</u>	<u>6'</u>	11,	<u>Limits</u>	
Analytes:					•		
Benzene	16000	16000	150000	73000	3900	2.0	ug/Kg
Bromodichloromethane	ND	ND	ND	ND	ND	2.0	ug/Kg
Bromoform	ND	ND	ND	ND	ND	2.0	ug/Kg
Bromomethane	ND	ND	ND	ND	ND	2.0	ug/Kg
n-Butylbenzene	ND	ND	ND	3500	ND	2.0	ug/Kg
sec-Butylbenzene	810	ND	6100	5100	ND	2.0	ug/Kg
tert-Butylbenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
Carbon tetrachloride	ND	ND	ND	ND	ND	2.0	ug/Kg
Chlorobenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
Chloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
Chloroform	130	ND	9100	ND	ND	2.0	ug/Kg
Chloromethane	ND	ND	ND	ND	ND	2.0	ug/Kg
2-Chlorotoluene	ND	ND	ND	ND	ND	2.0	ug/Kg
4-Chlorotoluene	ND	ND	ND	ND	ND	2.0	ug/Kg
Dibromochloromethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	2.0	ug/Kg
Dibromomethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,4-Dichtorobenzenc	ND	ND	ND	ND	ND	2.0	ug/Kg
Dichlorodifluoromethane	ND	ND	ND	ND	ND	2.0	ug/Kg
I,1-Dichloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2-Dichloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
I,I-Dichloroethene	ND	ND	ND	ND	ND	2.0	ug/Kg
•						2.0	-5.7.5

ND



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JONES ENVIRONMENTAL

LABORATORY RESULTS

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Long Beach, CA 90802

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· B-3679

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Hector Garcia

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03/04/03

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Project:

Lynwood Springs

Date Analyzed:

03/06/03

Project Address:

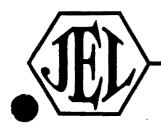
11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

			Oxygena				
Sample ID:	<u>W & A</u> HVW1-	<u>W & A</u> HVW1-	<u>W & A</u> HVW1-	<u>W & A</u> HVW3-	<u>W & A</u> HVW3-	Practical Quantitation	<u>Units</u>
	<u>6'</u>	11'	<u>23'</u>	<u>6'</u>	11.	<u>Limits</u>	
Analytes:					•		
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	2.0	ug/Kg
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2-Dichloropropane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,3-Dichloropropane	ND	ND	ND	ND	ND	2.0	ug/Kg
2,2-Dichloropropane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1-Dichloropropene	ND	ND	ND	ND	ND	2.0	ug/Kg
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	2.0	ug/Kg
trans-1,3-Dichloropropene	ND .	ND	ND	ND	ND	2.0	ug/Kg
Ethylbenzene	46000	43000	200000	33000	ND	2.0	ug/Kg
Hexachlorobutadiene	ND	ND	ND	ND	ND	2.0	ug/Kg
Isopropylbezene	3500	1600	23000	13000	ND	2.0	ug/Kg
4-Isopropyltoluene	2300	ND	13000	11000	ND	2.0	ug/Kg
Methylene chloride	ND	ND	ND	ND	ND	2.0	ug/Kg
Naphthalene	ND	10000	ND	ND	5600	2.0	ug/Kg
n-Propylbenzene	13000	12000	200000	170000	1600	2.0	ug/Kg
Styrene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1,1,2-Tetrachloroethane	ND	ND	ND	7900	ND	2.0	ug/Kg
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
Tetrachloroethylene	ND	ND	ND	ND	ND	2.0	ug/Kg
Toluene	180000	90000	1000000	240000	11000	2.0	ug/Kg
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	2.0	ug/Kg
Trichloroethylene	ND	ND	ND	ND	ND	2.0	ug/Kg
*					•		- -



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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/11/03

Client Address:

110 Pine Ave., Suite 900

B-3679

Long Beach, CA 90802

JEL Ref. No.:

Attn:

Hector Garcia

Date Sampled:

03/04/03

Project:

Date Received:

Lynwood Springs

Date Analyzed:

03/04/03 03/06/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

			Oxygena	tes			
Sample ID:	<u>W & A</u> HVW1-	<u>W & A</u> HVW1-	<u>W & A</u> HVW1-	<u>W & A</u> HVW3-	<u>W & A</u> HVW3-	Practical Quantitation	Units
Sample 1D.	6,	11'	23'	6'	11'	Limits	Omts
Analytes:					•		
Trichlorofluoromethane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	2.0	ug/Kg
1,2,4-Trimethylbenzene	228000	244000	828000	590000	63000	2.0	ug/Kg
1,3,5-Trimethylbenzene	413000	220000	391000	244000	30400	2.0	ug/Kg
Vinyl chloride	ND	ND	ND	ND	ND	2.0	ug/Kg
Xylenes	250000	150000	680000	150000	7100	2.0	ug/Kg
MTBE	720000	1800000	3400000	410000	850000	2.0	ug/Kg
Ethyl-tert-butylether	ND	ND ·	ND	ND	ND	2.0	ug/Kg
Di-ısopropylether	ND	ND	ND	ND	ND	2.0	ug/Kg
tert-amylmethylether	ND	ND	ND	ND	ND	2.0	ug/Kg
tert-Butylalcohol	ND	ND	ND	ND	ND	2.0	ug/Kg
Dilution Factor	370	4300	3900	3600	2000		,
Surrogate Recovery:						QC Limits	
Dibromofluoromethane	98%	134%	118%	139%	126%	60 - 140	
Toluene-d ₈	87%	85%	87%	92%	84%	60 - 140	
4-Bromofluorobenzene	86%	83%	83%	82%	81%	60 - 140	

ND



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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client: Client Address:

Attn:

WINEFIELD & ASSOCIATES, INC.

110 Pine Ave., Suite 900

Long Beach, CA 90802

Report Date:

03/11/03

JEL Ref. No.:

B-3679

Hector Garcia

Date Sampled:

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Project:

Date Received:

03/04/03

Lynwood Springs

Date Analyzed:

03/06/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

	<u>W & A</u>	<u>Practical</u>	,
Sample ID:	HVW3-	<u>Quantitation</u>	<u>Units</u>
	22.5	Limits	
Analytes:		•	
Benzene	110000	2.0	ug/Kg
Bromodichloromethane	ND	2.0	ug/Kg
Bromoform	ND	2.0	ug/Kg
Bromomethane	ND	2.0	ug/Kg
n-Butylbenzene	ND	2.0	ug/Kg
sec-Butylbenzene	3600	2.0	ug/Kg
tert-Butylbenzene	ND	2.0	ug/Kg
Carbon tetrachloride	ND	2.0	ug/Kg
Chlorobenzene	ND	2.0	ug/Kg
Chloroethane	ND	2.0	ug/Kg
Chloroform	5000	2.0	ug/Kg
Chloromethane	ND	2.0	ug/Kg
2-Chlorotoluene	ND	2.0	ug/Kg
4-Chlorotoluene	ND	2.0	ug/Kg
Dibromochloromethane	ND	2.0	`ug/Kg
1,2-Dibromo-3-chloropropane	ND	2.0	ug/Kg
1,2-Dibromoethane (EDB)	ND	2.0	ug/Kg
Dibromomethane	ND	2.0	ug/Kg
1,2- Dichlorobenzene	ND	2.0	ug/Kg
1,3-Dichlorobenzene	ND	2.0	ug/Kg
1,4-Dichlorobenzenc	ND	2.0	ug/Kg
Dichlorodifluoromethane	ND	2.0	ug/Kg
I, I-Dichloroethane	ND	2.0	ug/Kg
1,2-Dichloroethane	ND	2.0	ug/Kg
1,1-Dichloroethene	ND	2.0	ug/Kg
,	.,_	2.0	-56

ND



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JONES ENVIRONMENTAL

LABORATORY RESULTS

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Long Beach, CA 90802

Report Date:

03/11/03

JEL Ref. No.:

B-3679

Attn:

Hector Garcia

Date Sampled:

03/04/03

Date Received: Date Analyzed: 03/04/03

Project:

Lynwood Springs

03/06/03

Project Address:

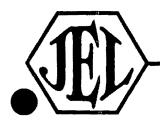
11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

	<u>W & A</u>	Practical	
Sample ID:	HVW3-	<u>Quantitation</u> Limits	Units
	22.5	<u>Limits</u>	
Analytes:			
cis-1,2-Dichloroethene	ND	2.0	ug/Kg
trans-1,2-Dichloroethene	ND	2.0	ug/Kg
1,2-Dichloropropane	ND	2.0	ug/Kg
1,3-Dichloropropane	ND	2.0	ug/Kg
2,2-Dichloropropane	ND	2.0	ug/Kg
1,1-Dichloropropene	ND	2.0	ug/Kg
cis-1,3-Dichloropropene	ND	2.0	ug/Kg
trans-1,3-Dichloropropene	ND	2.0	ug/Kg
Ethylbenzene	90000	2.0	ug/Kg
Hexachlorobutadiene	ND	2.0	ug/Kg
Isopropylbezene	12000	2.0	ug/Kg
4-Isopropyltoluene	8600	2.0	ug/Kg
Methylene chloride	ND	2.0	ug/Kg
Naphthalene	75000	2.0	ug/Kg
n-Propylbenzene	46000	2.0	ug/Kg
Styrene	ND	2.0	ug/Kg
1,1,1,2-Tetrachloroethane	ND	2.0	ug/Kg
1,1,2,2-Tetrachloroethane	ND	2.0	ug/Kg
Tetrachloroethylene	ND	2.0	ug/Kg
Toluene	430000	2.0	ug/Kg
1,2,3-Trichlorobenzene	ND	2.0	ug/Kg
1,2,4-Trichlorobenzene	ND	2.0	ug/Kg
1,1,1-Trichloroethane	ND	2.0	ug/Kg
1,1,2-Trichloroethane	ND	2.0	ug/Kg
Trichloroethylene	ND	2.0	ug/Kg
	1 (1)	. 2.0	5,175



Testing Laboratories

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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client: Client Address:

WINEFIELD & ASSOCIATES, INC.

110 Pine Ave., Suite 900

Long Beach, CA 90802

Report Date:

03/11/03

JEL Ref. No.:

B-3679

Attn:

Hector Garcia

Date Sampled:

03/04/03

Project:

Lynwood Springs

Date Received: Date Analyzed:

03/04/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

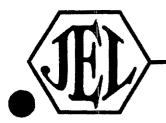
03/06/03

Soil

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

Sample ID:	<u>W & A</u> <u>HVW3-</u> 22.5'	Practical Quantitation Limits	<u>Units</u>
Analytes:			
Trichlorofluoromethane	ND	2.0	ug/Kg
1,2,3-Trichloropropane	ND	2.0	ug/Kg
1,2,4-Trimethylbenzene	75500	2.0	ug/Kg
1,3,5-Trimethylbenzene	117000	2.0	ug/Kg
Vinyl chloride	ND	2.0	ug/Kg
Xylenes	270000	2.0	ug/Kg
MTBE	2300000	2.0	ug/Kg
Ethyl-tert-butylether	ND	2.0	ug/Kg
Di-isopropylether	ND	2.0	ug/Kg
tert-amylmethylether	ND	2.0	ug/Kg
tert-Butylalcohol	ND	2.0	ug/Kg
Dilution Factor	2000	•	
Surrogate Recovery:		QC Limits	
Dibromofluoromethane	127%	60 - 140	
Toluene-d ₈	85%	60 - 140	
4-Bromofluorobenzene	82%	60 - 140	

ND



Testing Laboratories

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JONES ENVIRONMENTAL

QUALITY CONTROL INFORMATION

Client:

WINEFIELD & ASSOCIATES, INC.

03/11/03

Client Address:

110 Pine Ave., Suite 900

Report Date: JEL Ref. No.:

B-3679

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled:

03/04/03

Project:

Date Received: Date Analyzed: 03/04/03

Project Address:

Lynwood Springs

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

03/06/03 Soil

EPA 5035B/8260B- Volatile Organics by GC/MS

Sample Spiked: CLEAN SOIL

	MS	MSD		Acceptability
<u>Parameter</u>	Recovery (%)	Recovery (%)	<u>RPD</u>	Range (%)
Benzene	106%	108%	1.5%	60 - 140
Chlorobenzene	90%	95%	2.6%	60 - 140
Toluene	93%	92%	0.9%	60 - 140
Trichloroethylene	89%	91%	2.1%	60 - 140
1,1-Dichloroethylene	90%	90%	0.5%	60 - 140

Sample Spiked: CLEAN SOIL

Parameter	MS Recovery (%)	MSD Recovery (%)	RPD	Acceptability Range (%)
Benzene	61%	65%	7.0%	60 - 140
Chlorobenzene	83%	83%	0.8%	60 - 140
Toluene	76%	77%	0.8%	60 - 140
Trichloroethylene	78%	81%	4.1%	60 - 140
1,1-Dichloroethylene	70%	81%	14%	60 - 140

Method Blank = Not Detected

MS = Matrix Spike

= Matrix Spike Duplicate MSD RPD = Relative Percent Difference



Testing Laboratories

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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/11/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

. B-3679

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled:

03/04/03

Project:

Date Received:

03/04/03

Lynwood Springs

Date Analyzed:

03/09/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

		Oxygenutes .		
Sample ID:	<u>W & A-</u> <u>ER-4</u>		<u>Practical</u> <u>Quantitation</u> <u>Limits</u>	<u>Units</u>
Analytes:		•		
Benzene	ND		0.5	ug/L
Bromodichloromethane	ND		0.5	ug/L
Bromoform	ND		0.5	ug/L
Bromomethane	ND		0.5	ug/L
n-Butylbenzene	ND		0.5	ug/L
sec-Butylbenzene	ND		0.5	ug/L
tert-Butylbenzene	ND		0.5	ug/L
Carbon tetrachloride	ND		0.5	ug/L
Chlorobenzene	ND		0.5	ug/L
Chloroethane	ND		0.5	ug/L
Chloroform	ND		0.5	ug/L
Chloromethane	ND		0.5	ug/L
2-Chlorotoluene	ND		0.5	ug/L
4-Chlorotoluene	ND		0.5	ug/L
Dibromochloromethane	ND		0.5	ug/L
1,2-Dibromo-3-chloropropane	ND		0.5	ug/L
1,2-Dibromoethane (EDB)	ND		0.5	ug/L
Dibromomethane	ND		0.5	ug/L
1,2- Dichlorobenzene	ND		0.5	ug/L
1,3-Dichlorobenzene	ND		0.5	ug/L
1,4-Dichlorobenzenc	ND		0.5	ug/L
Dichlorodifluoromethane	ND		0.5	ug/L
1,1-Dichloroethane	ND		0.5	ug/L
1,2-Dichloroethane	ND		0.5	ug/L
1,1-Dichloroethene	ND		0.5	ug/L

ND



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JONES ENVIRONMENTAL

LABORATORY RESULTS

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110 Pine Ave., Suite 900

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Report Date:

03/11/03

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Attn:

Hector Garcia

Date Sampled:

03/04/03

Project:

Date Received:

03/04/03

Lynwood Springs

Date Analyzed:

03/09/03

Project Address:

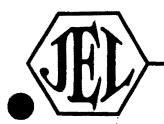
11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

		Oxygenates		
Sample ID:	<u>W & A-</u> <u>ER-4</u>		<u>Practical</u> <u>Quantitation</u> <u>Limits</u>	Units
Analytes:		' ,		
cis-1,2-Dichloroethene	ND		0.5	ug/L
trans-1,2-Dichloroethene	ND		0.5	ug/L
1,2-Dichloropropane	ND		0.5	ug/L
1,3-Dichloropropane	ND		0.5	ug/L
2,2-Dichloropropane	ND		0.5	ug/L
1,1-Dichloropropene	ND		0.5	ug/L
cis-1,3-Dichloropropene	ND		0.5	ug/L
trans-1,3-Dichloropropene	ND)	0.5	ug/L
Ethylbenzene	ND		0.5	ug/L
Hexachlorobutadiene	ND		0.5	ug/L
Isopropylbezene	ND		0.5	ug/L
4-Isopropyltoluene	ND		0.5	ug/L
Methylene chloride	ND		0.5	ug/L
Naphthalene	ND	•	0.5	ug/L
n-Propylbenzene	ND		0.5	ug/L
Styrene	ND		0.5	ug/L
1,1,1,2-Tetrachloroethane	ND		0.5	ug/L
1,1,2,2-Tctrachloroethane	ND		0.5	ug/L
Tetrachlorocthylene	ND		0.5	ug/L
Toluene	ND		0.5	ug/L
1,2,3-Trichlorobenzene	ND		0.5	ug/L
1,2,4-Trichlorobenzene	ND		0.5	ug/L
1,1,1-Trichloroethane	ND		0.5	ug/L
1,1,2-Trichloroethane	ЙD		0.5	ug/L
Trichloroethylene	ND		0.5	ug/L
				~



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client: Client Address: WINEFIELD & ASSOCIATES, INC.

110 Pine Ave., Suite 900

Long Beach, CA 90802

Report Date:

03/11/03

JEL Ref. No.:

B-3679

Attn:

Hector Garcia

Date Sampled:

03/04/03

Project:

Date Received:

03/04/03

Project Address:

Lynwood Springs

11600 S. Long Beach Blvd., Lynwood, CA

Date Analyzed: Physical State:

03/09/03 Water

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

Sample ID:	W & A- ER-4	<u>Practical</u> <u>Quantitation</u> <u>Limits</u>	<u>Units</u>
Analytes:		'	
Trichlorofluoromethane	ND	0.5	ug/L
1,2,3-Trichloropropane	ND	0.5	ug/L
1,2,4-Trimethylbenzene	ND	0.5	ug/L
1,3,5-Trimethylbenzene	ND	0.5	ug/L
Vinyl chloride	ND	0.5	ug/L
Xylenes	ND	0.5	ug/L
MTBE	ND	0.5	ug/L
Ethyl-tert-butylether	ND	0.5	ug/L
Di-ısopropylether	ND	0.5	ug/L
tert-amylmethylether	ND	. 0.5	ug/L
tert-Butylalcohol	ND	0.5	ug/L
Dilution Factor	1		
Surrogate Recovery:		QC Limits	
Dibromofluoromethane	93%	60 - 140	
Toluene-d ₈	100%	60 - 140	
4-Bromofluorobenzene	95%	60 - 140	

ND



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

QUALITY CONTROL INFORMATION

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/11/03

Client Address:

110 Pine Ave., Suite 900 Long Beach, CA 90802

JEL Ref. No.:

B-3679

Attn:

Hector Garcia

Date Sampled:

03/04/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 03/04/03 03/09/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS

Sample Spiked: DISTILLED WATER

<u>Parameter</u>	MS Recovery (%)	MSD Recovery (%)	<u>RPD</u>	Acceptability Range (%)
Benzene	99%	106%	%	60 - 140
Chlorobenzene	82%	84%	%	60 - 140
Toluene	82%	82%	%	60 - 140
Trichloroethylene	81%	82%	%	60 - 140
1,1-Dichloroethylene	81%	81%	%	60 - 140

Method Blank = Not Detected

MS = Matrix Spike

MSD = Matrix Spike Duplicate RPD = Relative Percent Difference

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WORLD OIL CORP.

9302 South-Garfield Avenue South Cate, CA 96266-3696

CHAIN OF CUSTODY Ana Lat

CHAIN	V	COSTODI	
alytical Labor	atory:	Jones	
h Project:	Ŕ	3679	

Phone	562) 928-010 8	Fax(562) 928	>039 1			Lai	JFIU	yect.	b		<u> </u>		- Control of the Cont	PgL_OI	
SITE/STATION #:					1	Τ				A۱	IALY	SES	REQUEST	ED	
SITE/STATION ADDRESS: 11 600	Long Bea	ich Bl vd	•		CONTAINERS				Thuo						
CONSULTANT: WINGHELD 4-	Associate	Δ	PHONE:(310)	578-6788] N	V			w J						
ADDRESS:				578-9688	S	ature			640			1 1			
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PROJECT # WAI- 007			wood Spri.		H	2		20C	Ø						
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Temperature Blank 5	water	3/4/03	0730		Ti	X									
WEASB1-1	Soil		0810		Ti				X						
WEASB1-6			0825		11			X							
W4ASB1-5,5			0825		13		X								
WF. ASB 2-11			0835		Tī			X							
WEASB1-10-5	17		0835		3		X								
WFASB1-20.5			0925		3		X						HOLI	D	
WEASB1-25.5			0940		14		X	X						ate on 8270	c
W: ASB1-25,5D			6940		3	1.	X								
W(ASB1 - 30.5			0955		T.				-						
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WEAHVWI-6			1200		17		X	X.		1			MS/m	5D (benow	Sinclud
WFAHVW1-11			1215		4	1	X	X							
WEAHVW1-23			1240		14	1	X	X							
WEAHVW3-25			H55		I				X						
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Printed Name: Shill K. MOTTS	sey		Printed Name: _	STRUK					7:30	Print	ed Nam	е		and the second s	
Signature TRICAL DVM SSE 1) RECEIVED BY:	Dete/Time: 3	0600 1 5 703	Signature:	The		ate/Ti	me: 3	1/5/	13		Signatur	e:		Date/Time:	
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WORLD OIL CORP.

9302 South Garfield Avenue South Gate, CA 90280-3896 ne(562) 928-0100 Fax(562) 928-039

CHAIN OF CUSTODY	7

Analytical Laboratory: JOSOLA
Lab Project: B 3679

Pa Z: 01 Z:

Phone(5	62) 928-0100	Fax(562) 928	<i>j</i> -0391													
SITE/STATION #:								-		Δ	NAL	YSE	SF	REQUES	TED	
SITE/STATION ADDRESS: 11600 L					ERS				Sulfa	2						
CONSULTANT: Winefield & A	ssociate	·^	PHONE:(310)	578-6788	AN				10							
ADDRESS:					CONTAINER	1/6			Cal							
PROJECT MGR. Bill Girolano	SAMPLER	JAME: SAA	FAX:()	•		17	1		1	Ì						
PROJECT # WAI-007_	PROJECT N	AME: I W	nwood Sprid	2	E C	13	18	Q	8							
TAT: 4Hr 4HPL 72Hr			Cother i Mined		NUMBER OF	19	£ +	12	10							
SHIPPED VIA: Walk In Courier	Fed Ex		Dothert Pick		Ž	2	8260 B	82	00							
SAMPLE ID	MATRIX		TIME	LAB ID						士	工		1		REMARKS	3
WAANVW3-6	Soil	3/4/03	1505		4		X	X								
WEAHVW3-11			1530		4		X	X					•	•		
WFAHVW3-ZZ.5			1555		4	X	X				1		\Box			
W4A-ER-4	Water	3/4/03			4	1	文	X	X		1		1		Many Control C	
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Printed Name Sula K Momss	en		Printed Name:							Pr	inted N	lame:				
Signature: Juli Lin Ser	Date/Time: 7	1/5/03	Signature:		С	Date/Tir	ime:				Signa	ature:			Date/Time	ie:
1) RECEIVED BY:		13103	2) RECEIVED BY	/:						3)		IVED	BY:			
Brinted Name: STELE TANK	. <u>J</u>	7:70														
Signature:	Date/Time:	15/13	1			Date/Tir	me:							44		
			1							- 1						



18 March 2003

Hector Garcia Winefield & Associates 110 Pine Ave, Suite 900 Long Beach, CA 90802

RE:Lynwood Springs

Work Order No.: 0303078

Attached are the results of the analyses for samples received by the laboratory on 03/07/03 09:45.

The samples were received by Sierra Analytical Labs, Inc. with a chain of custody record attached or completed at the submittal of the samples.

The analyses were performed according to the prescribed method as outlined by EPA, Standard Methods, and A.S.T.M.

The remaining portions of the samples will be disposed of within 30 days from the date of this report. If you require any additional retaining time, please advise us.

Sincerely,

Richard K. Forsyth

Aard 1 Zml

Laboratory Director



Project: Lynwood Springs

Project Number: WAI-007 / B3670 + B3671

Project Manager: Hector Garcia

Reported: 03/18/03 15:15

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	
W&A MW2-20.5'	0303078-01	Soil	03/03/03 08:35	03/07/03 09:45	_
W&A SB3-1'	0303078-02	Soil	03/03/03 12:35	03/07/03 09:45	
W&A SB3-6'	0303078-03	Soil	03/03/03 13:45	03/07/03 09:45	
W&A SB3-11'	0303078-04	Soil	03/03/03 13:20	03/07/03 09:45	
W&A SB3-26'	0303078-05	Soil	03/03/03 13:50	03/07/03 09:45	
W&A SB4-21'	0303078-06	Soil	03/03/03 15:55	03/07/03 09:45	
W&A SB2-2.5'	0303078-07	Soil	03/03/03 11:20	03/07/03 09:45	
W&A SB2-26'	0303078-08	Soil	03/03/03 12:10	03/07/03 09:45	
W&A ER-3	0303078-09	Liquid	03/03/03 16:00	03/07/03 09:45	

03/07/03- Sierra Sample # 0303078-09- Not enough H2O sample to analyze for 8270. Client was notified but never returned sample receiving's message. BRD.



Project: Lynwood Springs

Project Number: WAI-007 / B3670 + B3671

Project Manager: Hector Garcia

Reported: 03/18/03 15:15

Metals by EPA 6000/7000 Series Methods

Sierra Analytical Labs, Inc.

	R	eporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W&A MW2-20.5' (0303078-01) S	oil Sampled: 03/03/03 08	:35 R	eceived: (3/07/03 09	9:45				
Lead	3.5	2.8	mg/kg	1	B3C1326	03/13/03	03/17/03	EPA 6010B	
W&A SB3-1' (0303078-02) Soil	Sampled: 03/03/03 12:35	Receiv	ed: 03/07	/03 09:45					
Lead	11	2.8	mg/kg	1	B3C1326	03/13/03	03/17/03	EPA 6010B	
W&A SB3-26' (0303078-05) Soil	Sampled: 03/03/03 13:50	Recei	ved: 03/0	7/03 09:45					
Lead	ND	2.8	mg/kg	1	B3C1326	03/13/03	03/17/03	EPA 6010B	
W&A SB4-21' (0303078-06) Soil	Sampled: 03/03/03 15:55	Recei	ved: 03/0	7/03 09:45					
Lead	3.4	2.8	mg/kg	1	B3C1326	03/13/03	03/17/03	EPA 6010B	
W&A SB2-2.5' (0303078-07) Soil	Sampled: 03/03/03 11:20	Rece	ived: 03/0	7/03 09:45	5				
Lead	4.1	2.8	mg/kg	1	B3C1326	03/13/03	03/17/03	EPA 6010B	· · · · · · · · · · · · · · · · · · ·
W&A SB2-26' (0303078-08) Soil	Sampled: 03/03/03 12:10	Recei	ved: 03/0	7/03 09:45					
Lead	ND	2.8	mg/kg	1	B3C1326	03/13/03	03/17/03	EPA 6010B	
/&A ER-3 (0303078-09) Liquid	Sampled: 03/03/03 16:00	Recei	ved: 03/0	7/03 09:45	i				
Lead	ND	0.020	mg/L	1	B3C1405	03/14/03	03/14/03	EPA 6010B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Project: Lynwood Springs

Project Number: WAI-007 / B3670 + B3671
Project Manager: Hector Garcia

Reported: 04/22/03 15:51

Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W&A SB3-6' (0303078-03) Soil	Sampled: 03/03/03 13:45	Receive	d: 03/07/	03 09:45					
Acenaphthene	. ND	0.20	mg/kg	l	B3C1110	03/10/03	03/11/03	EPA 8270C	
Acenaphthylene	ND	0.20	15	11	"	**	"	н	
Anthracene	' ND	0.20	n	11	**	u	а	n .	
Benzidine	ND	0.20	**	Ð	н	n	н	P	
Benzo (a) anthracene	ND	0.20	11	п	11	O	10	"	
Benzo (b) fluoranthene	ND	0.20	11	H	££	11	Ħ	O	
Benzo (k) fluoranthene	ND	0.20	Ħ	n	н	11	11	it	
Benzo (a) pyrene	ND	0.20	н	n	11	0	Ħ	и	
Benzo (g,h,1) perylene	ND	0.20	**	**	59	u	n	ii	
Benzyl alcohol	ND	0.20	tt	**	n	н,	rt	n	
Bis(2-chloroethyl)ether	ND	0.20	0	19	n	11	11	tı	
Bis(2-chloroethoxy)methane	ND	0.20	11	39	н	#1	н	**	
Bis(2-ethylhexyl)phthalate	ND	0.20	**	*	11	14	5 #	u	
Bis(2-chloroisopropyl)ether	ND	0.20	н	н	11	n	P	14	
4-Bromophenyl phenyl ether	ND	0.20	11	9	**	a	н	**	
Butyl benzyl phthalate	ND	0.20	**	н	**	н	**	**	
4-Chloroaniline	ND	0.20	**	н	**	11	•	H	
2-Chlorophenol	ND	0.20	17	n	н	11	11	n	
4-Chloro-3-methylphenol	ND	0.20	η	11	**	44	#	**	
2-Chloronaphthalene	ND	0.20	n	11	11	11	II .		
4-Chlorophenyl phenyl ether	ND	0.20	16	H	u	**	11	н	
Chrysene	ND	0.20	**	,,	er	11	**	ø	
Dibenz (a,h) anthracene	ND	0.20	n	11	11	a	п	19	
Dibenzofuran	ND	0.20	н	Q.	n	Ð	11	n	
1,3-Dichlorobenzene	ND	0.20		н	ls .		11	,,	
1,2-Dichlorobenzene	ND	0.20	B	"	**	tt	**		
1,4-Dichlorobenzene	ND	0.20	,,	IP	u	**	1)	et .	
3,3'-Dichlorobenzidine	ND	0.20	**	11	11	n	"	15	
2,4-Dichlorophenol	ND	0.20		11		,,	**	н	
Diethyl phthalate	ND	0.20	11	11	o	32	tt	u	
2,4-Dimethylphenol	ND	0.20	**	и	n	**		11	
Dimethyl phthalate	ND	0.20	16	н	44	,,	16		
Di-n-butyl phthalate	ND	0.20		11	Ly			11	
2,4-Dinitrophenol	ND	0.20	ŧi	н	**	н		15	
•	ND		D	19	11	u			
4,6-Dinitro-2-methylphenol 2,4-Dinitrotoluene	ND ND	0.20 0.20	**	" H	u u			,,	
•			и	n 11		" H		"	
2,6-Dinitrotoluene	ND	0.20	"	rı H	"	**	"		
Di-n-octyl phthalate	ND	0.20	11	i.	"			n	
1,2-Diphenylhydrazine	ND	0.20				"	e	"	
Fluoranthene	ND	0.20	11	11	**	16	ti .	н	
Fluorene	ND	0.20	"	ţi.	**	**	11	15	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety



Project: Lynwood Springs

Project Number: WAI-007 / B3670 + B3671

Project Manager: Hector Garcia

Reported: 04/22/03 15:51

Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W&A SB3-6' (0303078-03) Soil	Sampled: 03/03/03 13:45	Receive	d: 03/07/0	3 09:45					
Hexachlorobenzene	D	0.20	mg/kg	1	B3C1110	03/10/03	03/11/03	EPA 8270C	
Hexachlorobutadiene	ND	0.20	31	n	н	U	н	**	
Hexachlorocyclopentadiene	ND	0.20	н	**	19	u	14	a	
Hexachloroethane	ND .	0.20	11	0	**	**	**	н	
Indeno (1,2,3-cd) pyrene	ND	0.20	**	t)	,	a	11	n	
Isophorone	ND	0.20	11	Ħ	to	11	31	*	
2-Methylnaphthalene	ND	0.20	19	**	и	"	**	n	
2-Methylphenol	ND	0.20	#	Ħ	69	n	H	at .	
4-Methylphenol	ND	0.20	u	II	11	H	n	u	
Naphthalene	ND	0.20	11	v	**	U	14	19	
2-Nitroaniline	ND	0.20	**	11	ti	и	**	a	
3-Nitroaniline	ND	0.20	11	**	н		n	W	
4-Nitroaniline	ND	0.20	H	it	**	R	**	tt.	
Nitrobenzene	ND	0.20	10	н	14	н	п	**	
2-Nitrophenol	ND	0.20	и	11	H		10	**	
4-Nitrophenol	ND	0.20	11	н	n	18	11	U	
N-Nitrosodimethylamine	ND	0.20	11	H	r#	"	11	11	
N-Nitrosodiphenylamine	ND	0.20	**		**	Ħ	**	u,	
N-Nitrosodi-n-propylamine	ND	0.20	u	11	**	u	н	н	
Pentachlorophenol	ND	0.20	**	ч	19	**	11	и	
Phenanthrene	ND	0.20	n	tr.	n	11	H	lí .	
Phenol	ND	0.20	11	16	**	11	19	11	
Pyrene	ND	0.20	ti	н	n	н	н	er e	
1,2,4-Trichlorobenzene	ND	0.20	11	н	11	н	**	**	
2,4,5-Trichlorophenol	ND	0.20	**	"	\$1	H	и	и	
2,4,6-Trichlorophenol	ND	0.20	61	4	11	tı	n	11	
Surrogate: 2-Fluorophenol		30.0 %	25-	121	"	"	"	24	
Surrogate: Phenol-d6		110 %	24	113	#	H	"	H	
Surrogate: Nutrobenzene-d5		30.0 %	23-	120	n	u	n	,,	
Surrogate: 2-Fluorobiphenyl		110%	30-	115	"	n	"	n	
Surrogate: 2,4,6-Tribromophenol		50.0 %	19-	122	#	"	tt.	**	
Surrogate: Terphenyl-dl4		50.0 %	18-	137	"	"	"	<i>u</i>	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Project: Lynwood Springs

Project Number: WAI-007 / B3670 + B3671

Project Manager: Hector Garcia

Reported: 04/22/03 15:51

Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

Analyte	Result	porting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
W&A SB3-11' (0303078-04) Soil	Sampled: 03/03/03 13:20	Receiv	ed: 03/07	/03 09:45	****				
Acenaphthene	ND	0.20	mg/kg	ı	B3C1110	03/10/03	03/11/03	EPA 8270C	is
Acenaphthylene	ND	0.20	•	11	**	u	**	10	
Anthracene	ND	0.20	11	11		11	н	11	
Benzidine	ND	0.20	u	19	н	11	H	**	
Benzo (a) anthracene	ND	0.20	11	**	17	**	**	10	
Benzo (b) fluoranthene	ND	0.20	11	10	**	н	Ħ	16	
Benzo (k) fluoranthene	ND	0.20		н	"	11	10	tr	
Benzo (a) pyrene	ND	0.20	n	v	ŧŧ	**	**	н	
Benzo (g,h,i) perylene	ND	0.20	11	n	**	н	п	н	
Benzyl alcohol	ND	0.20	' H	l+	u u	11		**	
Bis(2-chloroethyl)ether	ND	0.20	H	11	**	H	**	н	
Bis(2-chloroethoxy)methane	ND	0.20	**	n	n	0	R	lif.	
Bis(2-ethylhexyl)phthalate	ND	0.20	ъ.	11	н	**	н	•	
Bis(2-chlorosopropyl)ether	ND	0.20	n	10	14	**	н	U	
4-Bromophenyl phenyl ether	ND	0.20	n	n	"	Ħ	**	n	
Butyl benzyl phthalate	ND	0.20	н	14	29	**	**	н	
4-Chloroaniline	ND	0.20	lr .	13	16	it	n	**	
2-Chlorophenol	ND	0.20	H	n	"	H	19	**	
4-Chloro-3-methylphenol	ND	0.20	11	Ħ	ŧŧ	14	15	n	
2-Chloronaphthalene	ND	0.20	19	**	**	"	"	"	
4-Chlorophenyl phenyl ether	ND	0.20	ır	**	Ħ	14	57	**	
Chrysene	ND	0.20	10	10	54	11	16	**	
Dibenz (a,h) anthracene	ND	0.20	H	H	**	н		**	
Dibenzofuran	ND	0.20		и	11	11	b	H	
1,3-Dichlorobenzene	ND	0.20	11	11	16	n	"	11	
1,2-Dichlorobenzene	ND	0.20	11	ır	H	н	11	"	
1,4-Dichlorobenzene	ND	0.20	11	tt	**	11		n	
3,3'-Dichlorobenzidine	ND	0.20	11	**	ti	D.	.,	**	
2,4-Dichlorophenol	ND	0.20	н	п	н	11	**	Ħ	
Diethyl phthalate	ND	0.20		"	**	**	tt	**	
2,4-Dimethylphenol	ND	0.20	n	n	o o	14	11	n	
Dimethyl phthalate	ND	0.20	н	11	16	**	Ħ	н	
Di-n-butyl phthalate	ND	0.20	н	n	**	tt	n	н	
2,4-Dinitrophenol	ND	0.20	"	u	e	14	11	н	
4,6-Dinitro-2-methylphenol	ND	0.20	**	11	н	**	**	11	
2.4-Dinitrotoluene	ND	0.20	11	"	**	11	11	0	
2.6-Dinitrotoluene	ND	0.20	**	н	16	ıt	ş i	D.	
Di-n-octyl phthalate	ND	0.20	11	и	**	11	ıí.	#	
1,2-Diphenylhydrazine	ND	0.20	17	и	16	n	16	**	
Fluoranthene	ND	0.20	n	(8	I#	н	If	**	
Fluorene	ND	0.20	0	"	Ħ	ıı	11	н	



Project: Lynwood Springs

Project Number: WAI-007 / B3670 + B3671 Project Manager: Hector Garcia Reported: 04/22/03 15:51

Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

Analyte	R Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W&A SB3-11' (0303078-04) Soil	Sampled: 03/03/03 13:20	Receiv	ed: 03/07/0	3 09:45					
Hexachlorobenzene	ND	0.20	mg/kg	1	B3C1110	03/10/03	03/11/03	EPA 8270C	
Hexachlorobutadiene	ND	0.20	11	н	11	"	£#	n	
Hexachlorocyclopentadiene	ND	0.20	**	5 #	**	#1	n	"	
Hexachloroethane	ND	0.20	11	11	ч	"	19	н	
Indeno (1,2,3-cd) pyrene	ND	0.20	11	14	11	11	it.	"	
Isophorone	ND	0.20	**	ţŧ	**	"	"	n	
2-Methylnaphthalene	ND	0.20	п	u	u	11	**	"	
2-Methylphenol	ND	0.20	h	н		11	41	н	
4-Methylphenol	ND	0.20	11	*1	11	tt	n	n	
Naphthalene	ND	0.20		н	11	н	10	II	
2-Nitroaniline	ND	0.20	11	11	n	**	11	n	
3-Nitroaniline	ND	0.20	п	Ħ	н	п .	н	H	
4-Nitroaniline	ND	0.20	tr.	14	15	#	ee	11	
Nitrobenzene	ND	0.20	19	Ħ	41	**	Ħ	н	
2-Nitrophenol	ND	0.20	н	19	n	11	**	11	
4-Nitrophenol	ND	0.20	**	ij	e	**	**	**	
N-Nitrosodimethylamine	ND	0.20	n	11	, ,	ti .	n	11	
N-Nitrosodiphenylamine	ND	0.20	u	**	**	**	**	и	
N-Nitrosodi-n-propylamine	ND	0.20	11	Ð	н	11	u	11	
Pentachlorophenol	ND	0.20	11	**	11	ft.	**	11	
Phenanthrene	ND	0.20	11	**	н	II .	n	н	
Phenol	ND .	0.20	17	,,	**	#		н	
Pyrene	ND	0.20	H	**	**	II .	11	#	
1,2,4-Trichlorobenzene	ND	0.20	n	14	19	и	11	u	
2,4,5-Trichlorophenol	ND	0.20	14	12	н	11	tz	51	
2,4,6-Trichlorophenol	ND	0.20	13	11	#	**	**	11	
Surrogate · 2-Fluorophenol		10.0 %	25-12	?1	,,	P	n	"	
Surrogate: Phenol-d6		82.0 %	24-1	13	**	ŧ	n	,,	
Surrogate: Nitrobenzene-d5		31.0%	23-12	20	n	**	Ħ	R	
Surrogate: 2-Fluorobiphenyl	•	66.0 %	30-1	15	,,	"	"	n	
Surrogate: 2,4,6-Tribromophenol	•	41.0%	19-12	?2	**	n	<i>n</i>	"	
Surrogate. Terphenyl-dl4		55.0 %	18-13		"	n	,,	#	



Project: Lynwood Springs

Project Number: WAI-007 / B3670 + B3671

Project Manager. Hector Garcia

Reported: 03/18/03 15:15

Metals by EPA 6000/7000 Series Methods - Quality Control

Sierra Analytical Labs, Inc.

		Reporting		Spike	Source		%REC		RPD	
Алајуtе	Result	Lunit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B3C1326 - EPA 3050B										1
Blank (B3C1326-BLK1)				Prepared:	03/13/03	Analyzed	: 03/17/03			
Lead	ND	2.8	mg/kg	<u></u>						
LCS (B3C1326-BS1)				Prepared:	03/13/03	Analyzed	: 03/17/03			
Lead	107	2.8	mg/kg	100		107	80-120			
Matrix Spike (B3C1326-MS1)	Sou	rce: 030307	8-01	Prepared:	03/13/03	Analyzed	: 03/17/03			
Lead	97.1	2.8	mg/kg	91.0	3.5	103	70-130			
Matrix Spike Dup (B3C1326-MSD1)	Sou	rce: 030307	8-01	Prepared:	03/13/03	Analyzed	: 03/17/03			
Lead	105	2.8	mg/kg	95.0	3.5	107	70-130	7.82	20	
Batch B3C1405 - EPA 3010A										
Blank (B3C1405-BLK1)			-	Prepared	& Analyz	ed: 03/14/0)3			
Lead	ND	0.020	mg/L							
CS (B3C1405-BS1)				Prepared	& Analyz	ed: 03/14/0)3			
ead	0.191	0.020	mg/L	0.200		95.5	80-120			
Matrix Spike (B3C1405-MS1)	Sour	rce: 030307	8-09	Prepared of	& Analyz	ed: 03/14/0)3			
Lead	0.195	0.020	mg/L	0.200	ND	97.5	75-125			***************************************
Matrix Spike Dup (B3C1405-MSD1)	Sour	rce: 030307	8-09	Prepared a	& Analyz	ed: 03/14/0	3			
Lead	0.194	0.020	mg/L	0.200	ND	97.0	75-125	0.514	20	



Project: Lynwood Springs

Project Number: WAI-007 / B3670 + B3671

Project Manager: Hector Garcia

Reported: 03/18/03 15:15

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD .	No.
	VESU	· · · · · · · · · · · · · · · · · · ·	Oillis	LEVE	resur	ANEC	Limis	- Krb	Limit	Notes
Batch B3C1110 - EPA 3550B Solid Ext					****				····	
Blank (B3C1110-BLK1)				Prepared:	03/10/03	Analyzed	03/11/03			
Acenaphthene	ND	1.0	mg/kg							
Acenaphthylene .	ND	1.0								
Anthracene	ND	1.0	n							
Benzidine	ND	1.0	n							
Benzo (a) anthracene	ND	1.0	*							
Benzo (b) fluoranthene	ND	1.0	n							
Benzo (k) fluoranthene	ND	1.0	Ħ							
Benzo (a) pyrene	ND	1.0	11							
Benzo (g,h,i) perylene	ND	1.0	**							
Benzyl alcohol	ND	1.0	**			٠,				
Bis(2-chloroethyl)ether	ND	1.0	#							
Bis(2-chloroethoxy)methane	ND	1.0	11							
Bis(2-ethylhexyl)phthalate	ND	1.0	*							
Bis(2-chloroisopropyl)ether	ND	1.0	**							
Bromophenyl phenyl ether	ND	1.0								
Butyl benzyl phthalate	ND	1.0	*							
4-Chloroaniline	ND	1.0	H							
2-Chiorophenol	ND	1.0	"							
4-Chloro-3-methylphenol	ND	1.0	n		·					
2-Chloronaphthalene	ND	1.0	**							
4-Chlorophenyl phenyl ether	ND	1.0	#							
Chrysene .	ND	1.0	Ħ		+					
Dibenz (a,h) anthracene	ND	1.0	n							
Dibenzofuran	ND	1.0	n							
1,3-Dichlorobenzene	ND	1.0	'm							
1,2-Dichlorobenzene	ND	1.0	**							
1,4-Dichlorobenzene	ND	1.0	r							
3,3'-Dichlorobenzidine	ND	1.0	*							
2,4-Dichlorophenol	ND	1.0	17							
Diethyl phthalate	ND	1.0	н							
2,4-Dimethylphenol	ND	1.0	H							
Dimethyl phthalate	ND	1.0	*							
Dr-n-butyl phthalate	ND	1.0								
2,4-Dinitrophenol	ND	1.0	Ħ							
4,6-Dinitro-2-methylphenol	ND	1.0	н							
2,4-Dinitrotoluene	ND	1.0	**							
2,6-Dimitrotoluene	ND	1.0	n							



Project: Lynwood Springs

Project Number: WAI-007 / B3670 + B3671

Project Manager: Hector Garcia

Reported: 03/18/03 15:15

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Lumit	Units	Spike Level	Source Result	%REC	%REC Lumits	RPD	RPD Limit	Note
Batch B3C1110 - EPA 3550B Soli	id Ext				· <u> </u>		****		· · · · · · · · · · · · · · · · · · ·	
Blank (B3C1110-BLK1)				Prepared:	03/10/03	Analyzed	: 03/11/03			· · · · · · · · · · · · · · · · · · ·
Di-n-octyl phthalate	ND	1.0	mg/kg							
1,2-Diphenylhydrazine	ND	1.0	Ħ							
Fluoranthene	ND	1.0	**							
Fluorene	ND	1.0								
Hexachlorobenzene	ND	1.0	*			*				
Hexachlorobutadiene	ND	1.0	**							
Hexachlorocyclopentadiene	ND	1.0	n							
Hexachloroethane	ND	1.0	n							
Indeno (1,2,3-cd) pyrene	ND	1.0	Ħ							
Isophorone	ND	1.0	•							
2-Methylnaphthalene	ND	1.0								
2-Methylphenol	ND	1.0	я							
4-Methylpheno!	ND	1.0	*							
Naphthalene	ND	1.0	**							
-Nitroaniline	ND	1.0	*							
3-Nitroaniline	ND	1.0	*							
4-Nitroaniline	ND	1.0	**							
Nitrobenzene	ND	1.0	7							
2-Nitrophenol	ND	1.0	H							
4-Nitrophenol	ND	1.0								
N-Nitrosodimethylamine	ND	1.0	*							
N-Nitrosodiphenylamine	ND	1.0	*							
N-Nitrosodi-n-propylamine	ND	1.0	*							
Pentachlorophenol	ND	1.0	77							
henanthrene	ND	1.0								
Pheno!	ND	1.0	n							
Pyrene	ND	1.0	H							
2,4-Trichlorobenzene	ND	1.0	n							
2,4,5-Trichlorophenol	ND	1.0	•							
2,4,6-Trichlorophenol	ND	1.0	Ħ							
Surrogate: 2-Fluorophenol	0.870		,,	1.00		87.0	25-121			·
Surrogate: Phenol-d6	0.750		*	1.00		75.0	24-113			
Surrogate: Nitrobenzene-d5	0.900		#	1.00		90.0	23-120			
Surrogate: 2-Fluorobiphenyl	0.900		,	1.00		90.0	30-115			
Surrogate: 2,4,6-Tribromophenol	0.800		"	1.00		80.0	19-122			
Surrogaie · Terphenyl-dl4	0.700		P	1.00		70.0	18-137			



Project Lynwood Springs

Project Number: WAI-007 / B3670 + B3671

Project Manager: Hector Garcia

Reported: 03/18/03 15:15

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Note
Batch B3C1110 - EPA 3550B Solid Ex	t									-
LCS (B3C1110-BS1)				Prepared:	03/10/03	Analyzec	1: 03/11/03			
Acenaphthene	1.40	1.0	mg/kg	2.00		70.0	47-145			
2-Chlorophenol -	2.30	1.0	н	2.00		115	23-134			
4-Chloro-3-methylphenol	1.30	1.0	*	1.50		86.7	22-147			
l,4-Dichlorobenzene	0.800	1.0	Ħ	1.00		80.0	20-124			
2,4-Dinitrotoluene	1.10	1.0	*	1.00		110	39-139			
4-Nitrophenol	ND	1.0	#	1.00			0-132			
N-Nitrosodi-n-propylamine	ND	1.0	n	1.00			0-230			
Pentachlorophenol .	1.60	1.0	n	1.00		160	14-176			
Phenol	1.80	1.0	Ħ	2.00		90.0	5-112			
Ругеве	2.10	1.0		2.00		105	52-115			
1,2,4-Trichlorobenzene	1.10	1.0	*	1.00		110	44-142			
Matrix Spike (B3C1110-MS1)	Sor	rce: 030307	8-03	Prepared:	03/10/03	Analyzed	l: 03/11/03			
Acenaphthene	1.20	1.0	mg/kg	2.00	ND	60.0	47-145			
Chlorophenol	2.00	1.0		2.00	ND	100	23-134			
-Chloro-3-methylphenol	1.50	1.0	#	1.50	ND	100	22-147			
,4-Dichlorobenzene	0.600	1.0		1.00	ND	60.0	20-124			
2,4-Dinutrotoluene	0.800	1.0	-	1.00	ND	80.0	39-139			
I-Nitrophenol	ND	1.0	#	1.00	ND		0-132			
N-Nitrosodi-n-propylamine	ND	1.0	#	1.00	ND		0-230			
Pentachlorophenol	1.60	1.0	**	1.00	ND	160	14-176			
Phenol	2.10	1.0	*	2.00	ND	105	5-112			
Pyrene	1.70	1.0	**	2.00	ND	85.0	52-115			
,2,4-Trichlorobenzene	1.00	1.0	*	1.00	ND	100	44-142			
Matrix Spike Dup (B3C1110-MSD1)	Sou	rce: 030307	8-03	Prepared:	03/10/03	Analyzed	: 03/11/03			
Cenaphthene	1.10	1.0	mg/kg	2.00	ND	55.0	47-145	8.70	30	
-Chlorophenol	1.80	1.0	r	2.00	ND	90.0	23-134	10.5	30	
-Chloro-3-methylphenol	1.40	1.0		1.50	ND	93.3	22-147	6.90	30	
,4-Dichlorobenzene	0.500	1.0	n	1.00	ND	50.0	20-124	18.2	30	
,4-Dinitrotoluene	1.00	1.0	*	1.00	ND	100	39-139	22.2	30	
-Nitrophenol	ND	1.0	n	1.00	ND		0-132		30	
l-Nitrosodi-n-propylamine	ND	1.0	**	1.00	ND		0-230		30	
entachlorophenol	1.60	1.0	**	1.00	ND	160	14-176	0.00	30	
Phenol	1.80	1.0	*	2.00	ND	90.0	5-112	15.4	30	
yrene	1.90	1.0	**	2.00	ND	95.0	52-115	11.1	30	
,2,4-Trichlorobenzene	0.900	1.0	11	1.00	ND	90.0	44-142	10.5	30	



Project: Lynwood Springs

Project Number: WAI-007 / B3670 + B3671

Project Manager: Hector Garcia

Reported: 03/18/03 15:15

Notes and Definitions

DET

Analyte DETECTED

ND

Analyte NOT DETECTED at or above the reporting limit

NR

Not Reported

dry

Sample results reported on a dry weight basis

RPD

Relative Percent Difference



Res (141 M)

SIERRA ANALYTICAL

TEL: 949•348•9389 FAX: 949•348•9115

CHAIN OF CUSTODY RECORD

26052 Merit Circle • Suite 105 • Laguna Hills, CA • 92653

Lub Project ID 0303 078

Client Windfield +	ausoc			Cl	ent Project ID	- Cariant	13 36 70	2	0	Ana	alys	es F	Req	uest	ted			
Client Address / // Pl	ne ar	5 . J	ute	900 6	UHI-	od Spring	53671	do			1.					1		
- Forey &	ence, c	74 70	7800		um Around	☐ Immediate	24 Hour	-14										
Chent Tel Nov 5702 495.	5700			T	ime Requested.	48 Hour	72 Hour	DB										
Client Tel No: 5(02 495 - Client Fax No: 5(02 - 495 -	5811					☐ 4 Day	5 Day	10	a									
Client Proj Mgr. Nector (Parcie	<u>. </u>				☐ Normal	Mobile	A	00									
Client Sample ID.	Sierra Sample No.	Date/I	ïme	Matrix	Preservative	Container Type	No. of Containers	EPI	2						. '			Comments
WEA MW2-20.5'	01	3/3/0	835	Gro S	A			X										
WEA SB 3-1'	02.	3/3/33-	225	Soil			1	X										
WEA SB3-6'	03	16/	315	_'			1		X									
NEA SB3-11	94	u 13	320				1		X									
WAA SB3-26	95	1 /3	50					X									_	
WEA SBY-21	0%	15	:55				1	X										
WEA SB2-25	07:	1	20					X										
WEA SB2-26	08		10				1	X										
WEA-ER-3	09	16	(2)	Wate			12	甚	X		_							Both analysis
•					<u> </u>							<u></u>						<i>J</i>
Sampler Signature			Shipped	Via.							T	otal N	lumb	er of	Cont	ainer	rs	Sample Disposal:
Printed Name			(Carrier/	Windshill No)			-				S	ubmit	ted t	o Lal	borate	ory		Return to Chent
Rebugging BALLE Prume	_ 53.	7-3	Received	1	10Cu	2896	3.7.03	The	delivery horizatio	of samples n to perfort	and the	signatur	e on the	s chain o	of costods	form o	mstitutes trus ind	☐ 1 ab Disposal?
Company JEC	T _I m2	.45	Company	Sie	wood		ALUS	Cont	litions, 1	determines	wise ag	eed upon	ın wiil	ing bein-	een SILR	RA and	CHINI	Archivemos
Relinquished By	Date		Received	1 B ₁			Date:		(17	$\overline{\Omega}$	T	otal N	Vuint	per of	f Con	taine	rs	Other
Сипран	Гime		Company				Time	1 ')	•				borate			
1 Retinguished By	Date	1	Received				Date	FO	R LA	BORA	TOR	y USI	E ON	LY - :	Sampl	e Rec	eipt C	onditions:
								U	Intaci						Chilled	- Terr	np (°C)	2.8 ح
Special Instructions	Time		Company				Time			le Seals							s - Veri	fied By
•									Prope	rly Labe	eled	Cont	siner		Other	· Loca	ation	846 + RIEI
								ا ا	whhu	Spring 3	ampi	Conti	111161		Swag	LULA		



18 March 2003

Hector Garcia Winefield & Associates 110 Pine Ave, Suite 900 Long Beach, CA 90802

RE:Lynwood Springs

Work Order No.: 0303079

Attached are the results of the analyses for samples received by the laboratory on 03/07/03 09:45.

The samples were received by Sierra Analytical Labs, Inc. with a chain of custody record attached or completed at the submittal of the samples.

The analyses were performed according to the prescribed method as outlined by EPA, Standard Methods, and A.S.T.M.

The remaining portions of the samples will be disposed of within 30 days from the date of this report. If you require any additional retaining time, please advise us.

Sincerely,

Richard K. Forsyth

Shard & Zmyll

Laboratory Director



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

Reported: 03/18/03 15:25

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
W&A SB1-1	0303079-01	Soil	03/04/03 08:10	03/07/03 09:45
W&A SB1-6	0303079-02	Soil	03/04/03 08:25	03/07/03 09:45
W&A SB1-11	0303079-03	Soil	03/04/03 08:35	03/07/03 09:45
W&A SB1-25.5	0303079-04	Soil	03/04/03 09:40	03/07/03 09:45
W&A HVW1-2	0303079-05	Soil	03/04/03 11:40	03/07/03 09:45
W&A HVW1-6	0303079-06	Soil	03/04/03 12:00	03/07/03 09:45
W&A HVW1-11	0303079-07	Soil	03/04/03 12:15	03/07/03 09:45
W&A HVW1-23	0303079-08	Soil	03/04/03 12:40	03/07/03 09:45
W&A HVW3-2.5	0303079-09	Soil	03/04/03 14:55	03/07/03 09:45
W&A HVW3-6	0303079-10	Soil	03/04/03 15:05	03/07/03 09:45
W&A HVW3-11	0303079-11	Soil	03/04/03 15:30	03/07/03 09:45
W&A ER-4	0303079-12	Liquid	03/04/03 13:00	03/07/03 09:45

03/07/03- Sierra Sample # 0303079-12- Not enough H2O sample to analyze for 8270. Client was notified but never returned sample receiving's message. BRD.



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

Reported: 03/18/03 15:25

Metals by EPA 6000/7000 Series Methods Sierra Analytical Labs, Inc.

		Reporting				. ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Nou
W&A SB1-1 (0303079-01) Soll	Sampled: 03/04/03 08:10	Receive	d: 03/07/	03 09:45			• *************************************	· · · · · · · · · · · · · · · · · · ·	
Lead	13	2.8	mg/kg	1	B3C1326	03/13/03	03/17/03	EPA 6010B	
W&A HVW1-2 (0303079-05) So	il Sampled: 03/04/03 11:	40 Rece	lved: 03/	07/03 09:4	5				
Lead	24	2.8	mg/kg	1	B3C1326	03/13/03	03/17/03	EPA 6010B	
W&A HVW3-2.5 (0303079-09) 5	Soil Sampled: 03/04/03 1	4:55 Re	ceived: 0	3/07/03 09	:45				
Lead	ND	2.8	mg/kg	1	B3C1326	03/13/03	03/17/03	EPA 6010B	
W&A ER-4 (0303079-12) Liquid	Sampled: 03/04/03 13:0	0 Recei	ved: 03/0	7/03 09:45	;				
Lead	· ND	0.020	mg/L	1	B3C1405	03/14/03	03/14/03	EPA 6010B	-



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

Reported: 04/22/03 15:54

Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W&A SB1-6 (0303079-02) Soil	Sampled: 03/04/03 08:25	Receive	d: 03/07/0	3 09:45					
Acenaphthene	ND	0.20	mg/kg	1	B3C1110	03/10/03	03/11/03	EPA 8270C	
Acenaphthylene	ND	0.20	11	**	tt	13	tt	11	
Anthracene	ND	0.20	Ħ	14	н	11	11	11	
Benzidine	ND	0.20	11	ŧi	10	u	u	11	
Benzo (a) anthracene	ND	0.20	11	u	**	es es	u	11	
Benzo (b) fluoranthene	ND	0.20	н	34	18	ti	14	14	
Benzo (k) fluoranthene	ND	0.20	69	10	15	11	**	"	
Benzo (a) pyrene	ND	0.20	11	41	u	n	10	11	
Benzo (g,h,i) perylene	ND	0.20	n	ti	19	9	11	n	
Benzyl alcohol	ND	0.20	11	11	**	**	II	**	
Bis(2-chloroethyl)ether	ND	0.20	11	14		jt	"	н	
Bis(2-chloroethoxy)methane	ND	0.20	n	11	11		tt	**	
Bis(2-ethylhexyl)phthalate	ND	0.20	8	н •	**	ti	14	w	
Bis(2-chloroisopropyl)ether	ND	0.20	**	. 16	н	lt	16	55	
4-Bromophenyl phenyl ether	ND	0.20	n	н	19		**	11	
Butyl benzyl phthalate	ND	0.20	н	11	p	**	u	,,	
4-Chloroaniline	ND	0.20	11	11	н	u	IT	n	
2-Chlorophenol	ND	0.20	Ħ	16	11	**	16	и	
4-Chloro-3-methylphenol	ND	0.20	11	Ħ	**	"	#	11	
2-Chloronaphthalene	ND	0.20	"	и	н	n	14	н	
4-Chlorophenyl phenyl ether	ND	0.20	**	19	"	**	**	31	
Chrysene	ND	0.20	11	**	11	10	tr	**	
Dibenz (a,h) anthracene	ND	0.20	"	19	u	и	14	11	
Dibenzofuran	ND	0.20	D	11	**	n	**	11	
1,3-Dichlorobenzene	ND	0.20	и	11	**	**	u	n	
1,2-Dichlorobenzene	ND	0.20	**	11	11	ц	34	p	
1,4-Dichlorobenzene	ND	0.20	n	**	**	,,	**	11	
3,3'-Dichlorobenzidine	ND	0.20	11	įt.			н		
2,4-Dichlorophenol	ND	0.20	н	u	11		11	11	
Diethyl phthalate	ND	0.20	н		"	II.	tt	**	
2,4-Dimethylphenol	ND	0.20	,,	и	tr.	н	p p	и	
Dimethyl phthalate	ND	0.20	U	14	71	**	11	4	
	ND		*1		**	tf.		14	
Di-n-butyl phthalate		0.20	,,		"		**	"	
2,4-Dinitrophenol 4,6-Dinitro-2-methylphenol	ND ND	0.20	11		,,	.,	»	"	
2,4-Dinitrotoluene	ND ND	0.20			"	н	"		
		0.20	" #		11		17	"	
2,6-Dinitrotoluene	ND	0.20		,,	21	**		**	
Di-n-octyl phthalate	ND	0.20	и	,,			*		
1,2-Diphenylhydrazine	ND	0.20			**	11	H	11	
Fluoranthene	ND	0.20	**	11	и	44	H	11	
Fluorene	ND	0.20	н	H	>5	U	и,	n	



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

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Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
W&A SB1-6 (0303079-02) Soil	Sampled: 03/04/03 08:25	Receive	1: 03/07/0	3 09:45					
Hexachlorobenzene	ND	0.20	mg/kg	1	B3C1110	03/10/03	03/11/03	EPA 8270C	
Hexachlorobutadiene	ND	0.20	**	н	11	n	u	n	
Hexachlorocyclopentadiene	ND	0.20	**	n	Ħ	**	o	0	
Hexachloroethane	ND	0.20	10	68	**	u	19	11	-
Indeno (1,2,3-cd) pyrene	ND	0.20	**	н	**	"	**	tt	
Isophorone	ND	0.20	17	11	и	**	v	н	
2-Methylnaphthalene	ND	0.20	78	11	**	**	at	n	
2-Methylphenol	ND	0.20	+1	**	u	**	11	11	
4-Methylphenol	ND	0.20	H	**		H	и	14	
Naphthalene	ND	0.20	**	11	U	**	11	11	
2-Nitroaniline	ND	0.20	**	11	"		**	n	
3-Nitroantline	ND	0.20	11	11	"	11 ,	n	**	
4-Nitroaniline	ND	0.20	н	u	11	tt	n	п	
Nitrobenzene	ND	0.20	10	n	н	н	**	11	
2-Nitrophenol	ND	0.20	u	11	u	11	11	**	
4-Nitrophenol	ND	0.20	v	u	16	**	Ħ	tr.	
N-Nitrosodimethylamine	ND	0.20	19	11	13	u	20	14	
N-Nitrosodiphenylamine	ND	0.20	11	н	11	ų	11	"	
N-Nitrosodi-n-propylamine	ND	0.20	11	"	"	11	н	17	
Pentachlorophenol	ND	0.20	**	4	н	п	"	в	
Phenanthrene	ND	0.20	u	e	11	**	21		
Phenol	ND	0.20	**	11	11	#1	н	16	
Pyrene	ND	0.20	11	tr	b	11	**	11	
1,2,4-Trichlorobenzene	ND	0.20	**	**	u u	н	н	**	
2,4,5-Trichlorophenol	ND	0.20	e	19	n	n	n	et	
2,4,6-Trichlorophenol	ND	0.20	n	**	n	H	11	45	
Surrogate: 2-Fluorophenol		30.0 %	25-	121	"	"	"	"	
Surrogate: Phenol-d6		100 %	24-	113	•	,,	#	a	
Surrogate: Nitrobenzene-d5		30.0 %	23-	120	"	ø	n	"	
Surrogate: 2-Fluorobiphenyl		500%	30-	115	"	u	,,	n	
Surrogate: 2,4,6-Tribromophenol	•	40.0 %	19-	122	**	"	н	u	
Surrogate Terphenyl-dl4		100 %	18-		**	u	•	,,	



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

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Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

Analyte	Result	teporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
W&A SB1-11 (0303079-03) Soil	Sampled: 03/04/03 08:35	Receive	ed: 03/07/	03 09:45					
Acenaphthene	ND	0.20	mg/kg	1	B3C1110	03/10/03	03/11/03	EPA 8270C	
Acenaphthylene	ND	0.20	**	**	**	11	n	14	
Anthracene	ND	0.20	11	**	н	If	16	36	
Benzidine	ND	0.20	19	n	н	**	**	n	
Benzo (a) anthracene	ND	0.20	19	11	"	14	n	11	
Benzo (b) fluoranthene	ND	0.20	**	**	"	ít	11	11	
Benzo (k) fluoranthene	ND	0.20	+1	p	н	**	II .	ii .	
Benzo (a) pyrene	ND	0.20	**	41	ŧŧ	и	11	11	
Benzo (g,h,i) perylene	ND	0.20	14	**	10	**		**	
Benzyl alcohol	ND	0.20	I)	H	н	÷r	Ħ	n	
Bis(2-chloroethyl)ether	ND	0.20	11	11	11	14	16	н	
Bis(2-chloroethoxy)methane	ND	0.20	13	11	11	**	"	tf	
Bis(2-ethylhexyl)phthalate	ND	0.20	10	н	11		H	н	
Bis(2-chloroisopropyl)ether	ND	0.20	*1	11	**	10	11	H	
I-Bromophenyl phenyl ether	ND	0.20	"	a	В	11	11	н	
Butyl benzyl phthalate	ND	0.20	11	**		**	n	**	
l-Chloroaniline	ND	0.20	**	н	17	11		н	
2-Chlorophenol	ND	0.20	**	,,	41	**	ii	11	
I-Chloro-3-methylphenol	ND	0.20		ıı.	11	n	**	11	
2-Chloronaphthalene	ND	0.20		11	R	12	11	н	
I-Chlorophenyl phenyl ether	ND	0.20	17	"	n	n	19	10	
	ND ND		**	11	**	11	n	11	
Chrysene		0.20	**		n	**	11		
Dibenz (a,h) anthracene	ND	0.20			"	14	" B		
Dibenzofuran	ND	0.20	"	*		"	,,	" "	
,3-Dichlorobenzene	ND	0.20							
,2-Dichlorobenzene	ND	0.20	ti.	n	**	H	11	11	
,4-Dichlorobenzene	ND	0.20	н	Ħ	в	"	"	**	
3,3'-Dichlorobenzidine	ND	0.20	**	н	**	17	75	4	
2,4-Dichlorophenol	ND	0.20	н	11	H	"	Ħ	rs.	
Diethyl phthalate	ND	0.20	"	н	ti .	n	ti	u	
2,4-Dimethylphenol	ND	0 20	H	11	11	n	**	**	
Dimethyl phthalate	ND	0.20	II	v	μ	16	n	บ	
Di-n-butyl phthalate	ND	0.20	**	"		11	"	11	
2,4-Dinitrophenol	ND	0.20	**	ıı	n		11	v	
1,6-Dinitro-2-methylphenol	ND	0.20	11	**	**	14	**	11	
2,4-Dinitrotoluene	ND	0 20	**	ti	**		11	**	
2,6-Dinitrotoluene .	ND	0.20	ŧi	*	н	16	n	p	
Di-n-octyl phthalate	ND	0.20		**	"	19	"	,,	
,2-Diphenylhydrazine	ND	0.20	n	11	u	H		i)	
Fluoranthene	ND	0.20	77	н	**	н	11		
inotalitiele	ND	0.20		84		11	tr		



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Project Number: WAI-007
Project Manager: Hector Garcia

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Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

		eporting	11	Diliii	David	D		\$ 4 - A - 3	
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W&A SB1-11 (0303079-03) Soil	Sampled: 03/04/03 08:35	Receive	ed: 03/07/0	03 09:45					
Hexachlorobenzene	ND	0.20	mg/kg	1	B3C1110	03/10/03	03/11/03	EPA 8270C	
Hexachlorobutadiene	ND	0.20	n	n	**	"	n	3 f	
Hexachlorocyclopentadiene	ND	0.20	"	"	•	н	19	11	
Hexachloroethane	ND	0.20	и	tţ	tt	11	¥	tr	
Indeno (1,2,3-cd) pyrene	ND	0.20	11	jt.	"	**	**	**	
Isophorone	ND	0.20	11	14	er e	н	t)	II.	
2-Methylnaphthalene	ND	0.20	**	**	¢1	n	15	11	
2-Methylphenol	ND	0.20	U	17	U	19	11	"	
4-Methylphenol	ND	0.20	11	11	14	**	11	n	-
Naphthalene	ND	0.20	11	14	11	n	ŧŧ	tt	
2-Nitroaniline	ND	0.20	1.0	۳,	n	II .	u	и	
3-Nitroaniline	ND	0.20	**	*	n	**	14	н	
4-Nitroaniline	ND .	0.20	"	н	H		**	a	
Nitrobenzene'	ND	0.20	"	"	"	n	n	11	
2-Nitrophenol	ND	0.20	11	18	н	U	11	15	
4-Nitrophenol	ND	0.20	11	B	ti.	"	н	u	
N-Nitrosodimethylamine	ND	0.20	e e	u	u	**	н	tt.	
N-Nitrosodiphenylamine	ND	0.20	n	11	EP.	11	**		
N-Nitrosodi-n-propylamine	ND	0.20	11	tr	**	"	ŧŧ	"	
Pentachlorophenol	ND	0.20	"	11	"	e e	н	**	
Phenanthrene	ND	0.20	11	**	**	**	31	n .	
Phenol	ND	0.20	**	н	**	u	**		
Pyrene	ND	0.20	n	**	"	Ħ	II	*	
1,2,4-Trichlorobenzene	ND	0.20	19	Ħ	tı	и	н	Ti .	
2,4,5-Trichlorophenol	ND	0.20	**	17	**	e	"	и	
2,4,6-Trichlorophenol	ND	0.20	*	"	11	a	н	H	
Surrogate: 2-Fluorophenol		30.0 %	25-1	21	"	#	"	"	
Surrogate: Phenol-d6		25.0 %	24-1	13	"	H	n	"	
Surrogate: Nitrobenzene-d5		25.0 %	23-1	20	"	"	,,	**	
Surrogate: 2-Fluorobiphenyl		89.0 %	30-1	15	"	*	tt .	"	
Surrogate: 2,4,6-Tribromophenol		46.0 %	19-1	22	"	#	"	H	
Surrogate: Terphenyl-dl4		87.0%	18-1	37	"	Ħ	,,	p	



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

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Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

Reporting													
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes				
W&A SB1-25.5 (0303079-04) Soil	Sampled: 03/04/03 09:40	Recei	ived: 03/0	7/03 09:45	5								
Acenaphthene	ND	0.20	mg/kg	1	B3C1110	03/10/03	03/11/03	EPA 8270C					
Acenaphthylene	ND	0.20	••	11	14	a	**	II .					
Anthracene	ND	0.20	ıı	11	**	**	#1	**					
Benzidine	ND	0.20	"	Ħ	**	"	н	"					
Benzo (a) anthracene	ND	0.20	14	te	11	91	19	v					
Benzo (b) fluoranthene	, ND	0.20	u	11	19	11	**	н					
Benzo (k) fluoranthene	ND	0.20	H	Ħ	**	11	**	11					
Benzo (a) pyrene	ND	0.20	u	u	**	a	Ħ	u					
Benzo (g,h,i) perylene	ND	0.20	et	n	n	**	59	rr .					
Benzyl alcohol	ND	0.20	U	Ħ	**	"	"	u					
Bis(2-chloroethyl)ether	ND	0.20	u	n	59	u	18	re					
Bis(2-chloroethoxy)methane	ND	0.20	19	и.	19	n .	"	11					
Bis(2-ethylhexyl)phthalate	ND	0.20	n	19	11	, ,	**	**					
Bis(2-chloroisopropyl)ether	ND	0.20	13	**	**	**	•	н					
4-Bromophenyl phenyl ether	ND	0.20	11	p	н,	в	**	**					
Butyl benzyl phthalate	ND	0.20	**	n	11	**	**	u					
4-Chloroaniline	ND	0.20	н	p		ĸ	**	11					
-Chlorophenol	ND	0.20	H	Ħ	Ħ	"	•	n					
4-Chloro-3-methylphenol	ND	0.20	**	н	ts	et	11	11					
2-Chloronaphthalene	ND	0.20	Ħ	tr	"	"		u					
4-Chlorophenyl phenyl ether	ND	0.20	44	н	н	11	10	H					
Chrysene	ND	0.20	0	,1	Ħ		*	n					
Dibenz (a,h) anthracene	ND	0.20	**	n		**	i t	11					
Dibenzofuran	ND	0.20	4	n	Ħ	**	n	**					
1,3-Dichlorobenzene	ND	0.20	ti	11	**		44	**					
1,2-Dichlorobenzene	ND	0.20	69	н		ti		ø					
1,4-Dichlorobenzene	ND	0.20		n	"	**	"	Ħ					
•			ti	11	**	 D		,					
3,3'-Dichlorobenzidine	ND	0.20	**	 H		"	**	**					
2,4-Dichlorophenol	ND	0.20		,,	11		"	"					
Diethyl phthalate	ND	0.20	"					.					
2,4-Dimethylphenol	ND	0.20		**	**	Ħ	11	11					
Dimethyl phthalate	ND	0.20	n	11	н	n	н	ŧı					
Di-n-butyl phthalate	ND	0.20	**	IJ	**	п	11	10					
2,4-Dinitrophenol	ND	0.20	н	11	ti	ři.	n	11					
4,6-Dinitro-2-methylphenol	ND	0.20	n	п	"	tt	H	н					
2,4-Dinitrotoluene	ND	0.20	,,	ŧ	**	н	H	16					
2,6-Dinitrotoluene	ND	0.20	Ħ	**	ti	#	n	**					
Di-n-octyl phthalate	ND	0.20		11	**	ft	**	**					
1,2-Diphenylhydrazine	ND	0.20	H	**	st	11	n	11					
Fluoranthene	ND	0.20	**	u	р	н	17	n					
Fluorene	ND	0.20	D	st	**	н	**	v					



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

Reported: 04/22/03 15:54

Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

_		orting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
W&A SB1-25.5 (0303079-04) Soil	Sampled: 03/04/03 09:40	Recei	ived: 03/07	/03 09:45	5				
Hexachlorobenzene	ND	0.20	mg/kg	i	B3C1110	03/10/03	03/11/03	EPA 8270C	
Hexachlorobutadiene	ND	0.20	**	u	B	11	**	**	
Hexachlorocyclopentadiene	ND	0.20	11	11	11	и	"	**	
Hexachloroethane	ND	0.20	14	**	19	#	19	H	
Indeno (1,2,3-cd) pyrene	ND	0.20	**	"	tr	И	•	н ,	
Isophorone	ND	0.20	**	1)		11	19	n	
2-Methylnaphthalene	ND	0.20	U	11	**	11	U	n	
2-Methylphenol	ND	0.20	ø	11	ıı .	n .	н	H.	
4-Methylphenol	ND	0.20	**	**		10	**	n	
Naphthalene	6.1	0.20	n	11	u	Ħ	11	u	
2-Nitroaniline	ND	0.20	15	H		**	н	11	
3-Nitroaniline	ND	0.20	**	H	"		v	**	
4-Nitroaniline	ND	0.20	**	11	**	**	18	· .	
Nitrobenzene	ND	0.20	н	**	U	29	"	16	
2-Nitrophenol	ND	0.20	q	"	**	**	н	**	
4-Nitrophenol	ND	0.20	n	**	n	10	**	11	
N-Nitrosodimethylamine	ND	0.20	н	н	Ħ	Ħ	11	**	
N-Nitrosodiphenylamine	ND	0.20	н	11	**	IP.	11	**	
N-Nitrosodi-n-propylamine	ND	0.20	**	11	"	n	119	**	
Pentachiorophenol	ND	0.20	H	11	"	"	ts	**	
Phenanthrene	ND	0.20	**	10	**	şt	11	н	
Phenol	ND	0.20	N	u	n	н	**	"	
Pyrene	ND	0.20	n	n	41		н	H	
1,2,4-Trichlorobenzene	ND	0.20	**	**	n	11	,	11	
2,4,5-Trichlorophenol	ND	0.20	tt.	11	11	. 11	n	**	
2,4,6-Trichlorophenol	ND	0.20	n	14	**	11	н	H	
Surrogate: 2-Fluorophenol	32	2.0 %	25-1	21	n	n	н	"	
Surrogate: Phenol-d6	86	5.0 %	24-1	13	**	,,	"	tt	
Surrogate: Nitrobenzene-d5	62	2.0%	23-1	20	ø	ø	ri	n	
Surrogate: 2-Fluorobiphenyl	1	04 %	30-1	15	**	H	"	,,	
Surrogate: 2,4,6-Tribromophenol	4.	2.0 %	19-1	22	"	#	**	"	
Surrogate: Terphenyl-dl4		2.0 %	18-1		*	"	"	#	



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

Reported: 04/22/03 15:54

Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

		porting			_	_			
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W&A HVW1-6 (0303079-06) Soil	Sampled: 03/04/03 12:00	Recei	ived: 03/07	7/03 09:45					
Acenaphthene	· ND	0.20	mg/kg		B3C1110	03/10/03	03/11/03	EPA 8270C	
Acenaphthylene		0.20	н	IJ	н	н	n	tr	
Anthracene	· ND	0.20	н	u	"	11	"	н	
Benzidine	ND	0.20	11	18	"	11	11	11	
Benzo (a) anthracene	ND	0.20	11	**	"	**	11	91	
Benzo (b) fluoranthene	ND	0.20	ш	16		п	"	н	
Benzo (k) fluoranthene	ND	0.20	**	H	н	H	11	**	
Benzo (a) pyrene	ND	0.20	tt	"	**	11	*	**	
Benzo (g,h,i) perylene	ND	0.20	н	#1	Ħ	**	ff f	15	
Benzyl alcohol	ND	0.20	и	н	n	tr	u u	**	
Bis(2-chloroethyl)ether	ND	0.20	11	"		11	•	10	
Bis(2-chloroethoxy)methane	ND	0.20	Ħ	11	**		n	41	
Bis(2-ethylhexyl)phthalate	ND	0.20	ŧI.	n	н	h	U	U	
Bis(2-chloroisopropyl)ether	ND	0.20	**	**	11	17	н	11	
4-Bromophenyl phenyl ether	ND	0.20	14	**	11	**	n	11	
Butyl benzyl phthalate	ND	0.20	Ħ	11	tr.	"	н	11	
4-Chloroaniline	ND	0.20	*	н	11	u	"	#	
2-Chlorophenol	ND	0.20	н	11	u	u	n	Ð	
4-Chloro-3-methylphenol	ND	0.20	ŧr	31	п	н	н	19	
2-Chloronaphthalene	ND	0.20	H	11	u	н	н	v	
4-Chlorophenyl phenyl ether	ND	0.20	11	H	n	"	**		
Chrysene	ND	0.20	19	11	н	**	"	11	
Dibenz (a,h) anthracene	ND	0.20	н	11	10	H	n	11	
Dibenzofuran	ND	0.20	11	н	н	ø	11	н	
1,3-Dichlorobenzene	ND	0.20	11	11	"	11	11	**	
1,2-Dichlorobenzene	ND	0.20	**	**	#	p	ti	84	
1,4-Dichlorobenzene	ND	0.20	įt.	ŧi	н	11	11	16	
3,3'-Dichlorobenzidine	ND	0.20	**	**	**	**		0	
2,4-Dichlorophenol	ND	0.20	"	"	н	u	н	H	
Diethyl phthalate	ND	0.20	tr	н	а	U	**	н	
2,4-Dimethylphenol	ND	0.20	n	11	44	**	u.	**	
Dimethyl phthalate	ND	0.20	**	**	**	**	11	n	
Di-n-butyl phthalate	ND	0.20	ŧŧ	**	et e	н	11	**	
2,4-Dinitrophenol	ND	0.20	31	14	**	n	H	11	
4,6-Dinitro-2-methylphenol	ND	0.20	**	,,	ш	**	11	h	
2,4-Dinitrotoluene	ND ND	0.20	n	it.	11			*	
2,6-Dinitrotoluene	ND ND	0.20	14	11		**	** *I	"	
Di-n-octyl phthalate	ND	0.20			**	n	11	19	
1,2-Diphenylhydrazine	ND ND	0.20	,,		,,	"	"	a	
1,2-Diphenylhydrazine Fluoranthene	ND ND	0.20		,,	59 59	"	"		
	ND ND	0.20	11	"	11	11	11	"	
Fluorene	עא	0.20			-1	a	**	"	



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

Reported: 04/22/03 15:54

Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

	Re	porting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
W&A HVW1-6 (0303079-06) Soil	Sampled: 03/04/03 12:00	Rece	ived: 03/07/	03 09:45	5				
Hexachlorobenzene	ND	0.20	mg/kg	1	B3C1110	03/10/03	03/11/03	EPA 8270C	
Hexachlorobutadiene	ND	0.20	11	**	11	11	н	**	
Hexachlorocyclopentadiene	ND	0.20	11	**	H	ø	"	ti .	
Hexachloroethane .	ND	0.20	19	11	**	н	#	"	
Indeno (1,2,3-cd) pyrene	ND	0.20	*11	и	н	"	15	H	
Isophorone	ND	0.20	н	n	11	n	**	11	
2-Methylnaphthalene	ND	0.20	Ω	16	31	II .	16	**	
2-Methylphenol	ND	0.20	H	**	Ħ	n			
4-Methylphenol	ND	0.20	85	55	tı	**	11	II	
Naphthalene	10	0.20	n	n	**	**	14	ų	
2-Nitroaniline	ND	0.20	14	**	#7	н	11	**	
3-Nitroaniline	ND	0.20	11	11	**	* .,	31	u	
4-Nitroaniline	ND	0.20	If	If	**	,	11	и	
Nitrobenzene	ND	0.20	и	19	**	11	"	11	
2-Nitrophenol	ND	0.20	31	12	15	**	н	•	
4-Nitrophenol	ND	0.20	H	.,	**	**	**	**	
N-Nitrosodimethylamine	ND	0.20	ĮI	11	**	11	н	"	
N-Nitrosodiphenylamine	0.66	0.20	11	17	11	a	47	u	
N-Nitrosodi-n-propylamine	ND	0.20	**		II	**	**	11	
Pentachlorophenol	ND	0.20	u	14	n	51	31	"	
Phenanthrene	ND	0.20	11	Ħ	11	11	н	n	
Phenol	ND	0.20	n	16	11	*	**	**	
Pyrene -	ND	0.20	11	u	11	u	ч	4	
1,2,4-Trichlorobenzene	ND	0.20	•	**	11	#	**	ıı	
2,4,5-Trichlorophenol	ND	0.20	U	11	н	ņ	et	и	
2,4,6-Trichlorophenol	ND	0.20	a	**	tt	**	Ħ	11	
Surrogate: 2-Fluorophenol	5	0.0 %	25-12	1	11	"	ø		
Surrogate: Phenol-d6	4	7.0 %	24-11	3	"	"	n	it	
Surrogate: Nitrobenzene-d5	7	60%	23-12	0	"	#	u	u	
Surrogate: 2-Fluorobiphenyl	3	7.0 %	30-11	5	**	"	,,	n	
Surrogate: 2,4,6-Tribromophenol		0.0 %	19-12	2	#	**	u	"	
Surrogate: Terphenyl-dl4		1.0%	18-13		,,	#	"	"	



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

Reported: 04/22/03 15:54

Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

Analyta	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	N
Analyte						гтерагео	Analyzed	Michog	Note
W&A HVW1-11 (0303079-07) Soil	Sampled: 03/04/03 12	:15 Rec	eived: 03/	07/03 09:4	5	*******			
Acenaphthene	ND	0.20	mg/kg	1	B3C1110	03/10/03	03/11/03	EPA 8270C	
Acenaphthylene	ND	0.20	**	11	**	**	**	н	
Anthracene	ND	0.20	**	"	**		II	11	
Benzidine	ND	0.20	н	11	15	"	v	**	
Benzo (a) anthracene	ND	0.20	18	15	н	tt	IT	n	
Benzo (b) fluoranthene	ND	0.20	11	"	ŧı	*	ii.	"	
Benzo (k) fluoranthene	ND	0.20	**	\$1	19	**	H	11	
Benzo (a) pyrene	ND	0.20	11	11	**	ш	**	#	
Benzo (g,h,i) perylene	ND	0.20	n	**	Ħ	11	ŧı	11	
Benzyl alcohol	ND	0.20	**	**	11	**	H	**	
Bis(2-chloroethyl)ether	ND	0.20	11	u	**	н	11	u	
Bis(2-chloroethoxy)methane	ND	0.20	11		n	11	H	11	
Bis(2-ethylhexyl)phthalate	ND	0.20	11	11	19	п	n	#	
Bis(2-chloroisopropyl)ether	ND	0.20	"	19	tf	**	•	11	
4-Bromophenyl phenyl ether	ND	0.20	11	**	41	19	"	**	
Butyl benzyl phthalate	ND	0.20	н	u	41	**	16	n	
4-Chloroaniline	ND	0.20	#	"	"	н	11	n	
-Chlorophenol	ND	0.20	"	tt	11	19	n	11	
4-Chloro-3-methylphenol	ND	0.20	н	14	tt	u	#1	u	
2-Chloronaphthalene	ND	0.20	n	11	11	"	51	11	
4-Chlorophenyl phenyl ether	ND	0.20	**	11	11	u .	u	n	
Chrysene	ND	0.20	н	"	n	"	н	**	
Dibenz (a,h) anthracene	ND	0.20	31	ĸ	н	**	11	11	
Dibenzofuran	ND	0.20	Ħ	11	**	It	n	n .	
1,3-Dichlorobenzene	ND	0.20	11	ıı	0	**	n	**	
1,2-Dichlorobenzene	ND	0.20	11	11	**	11	n	11	
1,4-Dichlorobenzene	ND	0.20	10	н	11	н	"	**	
3.3'-Dichlorobenzidine	ND	0.20	a	n	н	H		н	
2,4-Dichlorophenol	ND	0.20	11		11	**	10	**	
Diethyl phthalate	ND	0.20	u	11	**	u	**	n	
2,4-Dimethylphenol	ND	0.20	11	**	11	ti	10	**	
Dimethyl phthalate	ND	0.20	**	11	н	н	н		
Di-n-butyl phthalate	ND	0.20		u	11	n	"	ŧ	
2,4-Dinitrophenol	ND	0.20	п	16	IF.	**	; ;;	я	
4,6-Dinitro-2-methylphenol	ND	0.20	.,	u	**	0	n	#	
2,4-Dinitrotoluene	ND	0.20	it.	11	14	**		v	
,			14	,,	11		11	ti	
2,6-Dinitrotoluene	ND	0.20	11	n	**	"		12	
Di-n-octyl phthalate	ND	0.20	11	**	19	" H	"	11	
1,2-Diphenylhydrazine	ND	0.20	"			"	"	H H	
Fluoranthene	ND	0.20	11	**	11		**	**	
Fluorene	ND	0.20	19	**	"		**	**	



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

Reported: 04/22/03 15:54

Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W&A HVW1-11 (0303079-07) Soil					15				
Hexachlorobenzene	ND	0.20	mg/kg	1	B3C1110	03/10/03	03/11/03	EPA 8270C	
Hexachlorobutadiene	ND	0.20	11	**	**	n		U	
Hexachlorocyclopentadiene	ND	0.20	•	n	. H	Ħ	**	u	
Hexachloroethane	ND	0.20	**	и	н	*	n	•	
Indeno (1,2,3-cd) pyrene	ND	0.20	11	D	29	. "	**		
Isophorone	ND	0.20	n	**	11	**	#	u	
2-Methylnaphthalene	ND	0.20	•		11	**	"	n	
2-Methylphenol	ND	0.20	**	R	ti	11	n	"	
4-Methylphenol	ND	0.20	tt	n	e	Ħ	11	н	
Naphthalene	5.2	0.20	и	н	"	и	u	в	
2-Nitroaniline	ND	0.20	н	37	10	11	14	ti .	
3-Nitroaniline	ND	0.20	"	Ħ	**	и ,	"	19	
4-Nitroaniline	ND	0.20	n	Ħ	16	n '	n	·	
Nitrobenzene	ND	0.20	**	ų.	"	14	**	**	
2-Nitrophenol	ND	0.20	u	n	11	11	**	н	
4-Nitrophenol	ND	0.20	11	11	19	u	н	11	
N-Nitrosodimethylamine	ND	0.20	11	*	11	11	**	12	
N-Nitrosodiphenylamine	ND	0.20	tz	11	н	и	n	**	
N-Nitrosodi-n-propylamine	3.1	0.20	**	v	**	**	n	U	
Pentachlorophenol	ND	0.20	**	*	**	н	w	11	
Phenanthrene	ND	0.20	11	ø	#	n	11	11	
Phenol	ND	0.20		ŧ	11	11	**	и	
Pyrene	ND	0.20	11	p	"	11	n	**	
1,2,4-Trichlorobenzene	ND	0.20	16	**	ti	**	**	11	
2,4,5-Trichlorophenol	ND	0.20	**	11	11	**	Ħ	16	
2,4,6-Trichlorophenol	ND	0.20	44	11	11	tt	11	W	
Surrogate: 2-Fluorophenol		42.0 %	25-1	121	н	n	"	#	
Surrogate: Phenol-d6		88.0 %	24-1	113	"	"	"	"	
Surrogate: Nitrobenzene-d5		43.0 %	23-1	20	. "	#	"	"	
Surrogate: 2-Fluorobiphenyl		72.0 %	30-1	115	#	tt .	n	H	
Surrogate: 2,4,6-Tribromophenol		81.0 %	19-1		H	"	, .	н	
Surrogate: Terphenyl-dl4		54.0 %	18-1		Ħ	Ħ	#	,,	



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

Reported: 04/22/03 15:54

Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

Analyte	Result	orting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
							, 200		110(0)
W&A HVW1-23 (0303079-08) Soil	Sampled: 03/04/03 12:40								····
Acenaphthene	ND	0.20	mg/kg	1	B3C1110	03/10/03	03/11/03	EPA 8270C	
Acenaphthylene	ND	0.20	H	Ħ	17	"	ŧı	es	
Anthracene	ND	0.20	H	11	п	В	"	n	
Benzidine	ND	0.20	Ħ	**	**	11	n 14	O	
Benzo (a) anthracene	ND	0.20	**	H	11	"		п	
Benzo (b) fluoranthene	ND	0.20	u	fi	n	ıı	"	n	
Benzo (k) fluoranthene	ND	0.20	19	tt.	н	**	11	11	
Benzo (a) pyrene	ND	0.20	rs.		14		Ħ	**	
Benzo (g,h,i) perylene	ND	0.20	u	Ħ	17	**	11	"	
Benzyl alcohol	ND	0.20	tı	t)	n	н	11	14	
Bis(2-chloroethyl)ether	ND	0.20	И	**	н	"	II	14	
Bis(2-chloroethoxy)methane	ND	0.20	**	Đ	**	٠.	#	"	
Bis(2-ethylhexyl)phthalate	ND	0.20	n	Ð	n	**	Ħ	11	
Bis(2-chloroisopropyl)ether	ND	0.20	н		**	**	н	**	
4-Bromophenyl phenyl ether	ND	0.20	"	n	11	"	14	ii	
Butyl benzyl phthalate	ND	0.20	**	н	**	**	**	Н	
4-Chloroaniline	ND	0.20	H	"	11	y,	Ħ	н	
2-Chlorophenol	ND	0.20	10	èr	11	"	"	"	
4-Chloro-3-methylphenol	ND	0.20	**	Ħ	11	"	#	11	
2-Chloronaphthalene	ND	0.20	14	11	11	**	11	11	
4-Chlorophenyl phenyl ether	ND	0.20		Ħ	**	i)	"	н	
Chrysene	ND	0.20	H	14	и	W	**	**	
Dibenz (a,h) anthracene	ND	0.20	11	n	w	H	n	11	
Dibenzofuran	ND	0.20	H	и	•	**	**	н	
1,3-Dichlorobenzene	ND	0.20	4	я	51	34	14	n	
1,2-Dichlorobenzene	ND	0.20	10	H	19	38	**	Ħ	
1,4-Dichlorobenzene	ND	0.20	н	11	*1	н	"	18	
3,3'-Dichlorobenzidine	ND	0.20	ø	**	**	17	11	n	
2,4-Dichlorophenol	ND	0.20	u	н	19	n	w	tt	
Diethyl phthalate	ND	0.20	ti	11	н	10	н	tu .	
2,4-Dimethylphenol	ND	0.20	11	**	19	*1	H.	н	
Dimethyl phthalate	ND	0.20	**	12	11	II.	11	#	
Di-n-butyl phthalate	ND	0.20	н	**	н	**	**	н	
2,4-Dinitrophenol	ND	0.20	**	tı	н	**	11	n	
4,6-Dinitro-2-methylphenol	ND	0.20	,,	H	#	i t	15	11	
2,4-Dinitrotoluene	ND	0.20	**	n	19		ü	31	
2.6-Dinitrotoluene	ND	0.20	u	58		11	14	n	
Di-n-octyl phthalate	ND	0.20	**	**	u	u	rí	**	
1,2-Diphenylhydrazine	ND	0.20	ti.	н	**	lt	"	,,	
Fluoranthene	ND	0.20	ø		и	**			
Fluorene	ND	0.20	**	н	11	tr		"	
1 tuorelle	שאו	U.ZU							



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

Reported: 04/22/03 15:54

Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
W&A HVW1-23 (0303079-08) Soil	Sampled: 03/04/03 1	2:40 Rec	eived: 03/	07/03 09:4	15				
Hexachlorobenzene	ND	0.20	mg/kg	ı	B3C1110	03/10/03	03/11/03	EPA 8270C	
Hexachlorobutadiene	ND	0.20	H	H	**	H	u	a	
Hexachlorocyclopentadiene	ND	0.20	u	H	Ħ	u	н	н	
Hexachloroethane	ND	0.20	н	11	н	H	"	n	
Indeno (1,2,3-cd) pyrene	ND	0.20	II .	**	0	н	45	"	
Isophorone	ND	0.20	19	n	#	**	ц	**	
2-Methylnaphthalene	ND	0.20	a	39	n	n	13	**	
2-Methylphenol	ND	0.20	11	11	U	и	"	"	
4-Methylphenol	ND	0.20	n	tt	11	11	Ħ	IP.	
Naphthalene	ND	0.20	te	Ħ	H	**	H	11	
2-Nitroaniline	ND	0.20	Ħ	н	н	**	**	**	
3-Nitroaniline	· ND	0.20	**	17	54	"	10	n	
4-Nitroaniline	ND	0.20	11	н	Ħ	4	11	"	
Nitrobenzene	ND	0.20	u	11	PF .	**	31	11	
2-Nitrophenol	ND	0.20	**	н	n	п	**	н	
4-Nitrophenol	ND	0.20	11	**	**	**	ti	a	
N-Nitrosodimethylamine	ND	0.20	**	n	**	¥	b)	**	
N-Nitrosodiphenylamine	ND	0.20	"	10	11	н		**	
N-Nitrosodi-n-propylamine	ND	0.20	12	#	**		**	H	
Pentachlorophenol	ND	0.20	"	"	H	**	59	**	
Phenanthrene	ND	0.20	n	**	19	0	••	n	
Phenol	ND	0.20	**	H	**		16	ч	
Pyrene	ND	0.20	n	**	ts.	11	**	n	
1,2,4-Trichlorobenzene	ND	0.20	н	17	"	**	u	н	
2,4,5-Trichlorophenol	ND	0.20	n	μ	Ħ	11	**	44	
2,4,6-Trichlorophenol	ND	0.20	H	11	11				
Surrogate: 2-Fluorophenol		30.0 %	25-	121	n	"	"	"	
Surrogate: Phenol-d6		90.0 %	24-	113	"	ıı		"	
Surrogate: Nitrobenzene-d5		30.0 %	23-	120	H	tt tt	**	"	
Surrogate: 2-Fluorobiphenyl		50.0 %	<i>30</i> -	115	"	"	"	e	
Surrogate: 2,4,6-Tribromophenol		40.0 %	19-	122	**	#	**	"	
Surrogate: Terphenyl-dl4		30.0 %	18-		н	# *	**	#	



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

Reported: 04/22/03 15:54

Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

Analyte	Result	porting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
W&A HVW3-6 (0303079-10) Soil	Sampled: 03/04/03 15:05	Rece	ived: 03/0	7/03 09:45					
Acenaphthene	ND	0.20	mg/kg	1	B3C1110	03/10/03	03/11/03	EPA 8270C	
Acenaphthylene	ND	0.20	mg/kg	"	BJC1110	03/10/03 #	03/11/03	" "	
Anthracene	ND	0.20	11	п	"	**	U	"	
Benzidine	ND	0.20	н	15	н	a	11	14	
Benzo (a) anthracene	ND	0.20	11	11	n	п	**	"	
Benzo (b) fluoranthene	ND	0.20	11	11	#	tt	μ	11	
Benzo (k) fluoranthene	ND	0.20	It	**		**	**	14	
Benzo (a) pyrene	ND	0.20	11	**	н	"	**	#	
Benzo (g,h,i) perylene	ND	0.20	ii	u	34	н	**	n	
Benzyl alcohol	ND	0.20	11	16	w	19	41	н	
Bis(2-chloroethyl)ether	ND	0.20		•	п	**	11	10	
Bis(2-chloroethoxy)methane	ND	0.20	**	"	0	*	tt	**	
Bis(2-ethylhexyl)phthalate	ND	0.20	**	, н		n '-	н	н	
Bis(2-chloroisopropyl)ether	ND	0.20	**	"	H	"	11	**	
4-Bromophenyl phenyl ether	ND	0.20	19	*	n	n	n	tr	
Butyl benzyl phthalate	ND	0.20	**	Ħ	n	tr	44	u	
4-Chloroaniline	ND	0.20	at .	10	tt	11	**	11	
2-Chlorophenol	ND	0.20	14	**	u	**	"	**	
4-Chloro-3-methylphenol	ND	0.20	0		31	It	п	19	
2-Chloronaphthalene	ND	0.20	n	n	10	"	**	**	
4-Chlorophenyl phenyl ether	ND	0.20	11	"	11	11	u	11	
Chrysene	ND	0.20	#	н	"	**	**	**	
Dibenz (a,h) anthracene	ND	0.20	н	**	**	11	**	**	
Dibenzofuran	ND	0.20	11	e	ŧ	u u	и	n	
1,3-Dichlorobenzene	ND	0.20	**	n	n	**	•	11	
1,2-Dichlorobenzene	ND	0.20	19	n	n	IT	**	**	
1,4-Dichlorobenzene	ND	0.20	н	**	11	n	31	n	
3,3'-Dichlorobenzidine	ND	0.20	a	н	,,	**	••	11	
2,4-Dichlorophenol	ND	0.20	II	sŧ	n	69	**	**	
Diethyl phthalate	ND	0.20	**	••	**			f2	
2,4-Dimethylphenol	ND	0.20	u	н	**	н	n	lt	
Dimethyl phthalate	ND	0.20	11	t†	**	**	"	11	
Di-n-butyl phthalate	ND	0.20	11	#	11	D	11	**	
2,4-Dinitrophenol	ND	0.20		n	**	11	n	jt	
4,6-Dinitro-2-methylphenol	ND	0.20	**	n	ц	**	tt	11	
2,4-Dinitrotoluene	ND	0.20	н	**	**	**	"	**	
2,6-Dinitrotoluene	ND	0.20	0	п	**	*1	н	и	
Di-n-octyl phthalate	ND	0.20	**	H	**	#	M	şt	
1,2-Diphenylhydrazine	ND	0.20	#	tf	#	F6	n	4	
Fluoranthene	ND	0.20	o	19	14	tt	ш	11	
Fluorene	ND	0.20	11	n	11	**	u	**	



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

Reported: 04/22/03 15:54

Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

Analyte	Result	porting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
						1 Tepared		Menion	NON
W&A HVW3-6 (0303079-10) Soil	Sampled: 03/04/03 15:05	Rece	ived: 03/07	//03 09:45	5				
Hexachlorobenzene	ND	0.20	mg/kg	1	B3C1110	03/10/03	03/11/03	EPA 8270C	
Hexachlorobutadiene	ND	0.20	11	"	u	PF .	19	#	
Hexachlorocyclopentadiene	. ND	0.20	н	Ü	н	11	**	H	
Hexachloroethane	ND	0.20	n	19	**	**	11	14	
Indeno (1,2,3-cd) pyrene	ND	0.20	11	**	47	"	11	Ħ	
Isophorone	ND	0.20	n	н	D	21	"	n	
2-Methylnaphthalene	ND	0.20	n	н		**	u	н	
2-Methylphenol	ND	0.20	11	n	H	11	11	19	
4-Methylphenol	ND	0.20	u	н	н	н	**	•	
Naphthalene	24	0.20	11	n	•	U	n	11	
2-Nitroaniline	ND	0.20	u	11	19	**	u	п	
3-Nitroaniline	ND	0.20	D	**	**	"	н	11	
4-Nitroaniline	ND	0.20	11	D	15	,	**	**	
Nitrobenzene	ND	0.20	11	"	u	**	v	11	
2-Nitrophenol	ND	0.20	D.	**	II	n	н	"	
4-Nitrophenol	ND	0.20	11	*	n	11	"	P	
N-Nitrosodimethylamine	ND	0.20	III	11	14	**	и	н	
N-Nitrosodiphenylamine	ND	0.20	н	41	er .	n	n		
N-Nitrosodi-n-propylamine	ND	0.20	a	n	u	11	*1	11	
Pentachlorophenol	ND	0.20	er	n	#1	11	11		
Phenanthrene	ND	0.20	lf .	**	"	н	11	11	
Phenol	ND	0.20	**	tr	ti	Ħ		17	
Pyrene	ND	0.20	**	ts	**	11	н	в	
1,2,4-Trichlorobenzene	ND	0.20	n	11	n	U	11	n	
2,4,5-Trichlorophenol	ND	0.20	n	t)	**	**	u	**	
2,4,6-Trichlorophenol	ND	0.20	u	n	14	n	H	ti.	
Surrogate: 2-Fluorophenol	4.	4.0 %	25-1	21	H	"	"	n	
Surrogate: Phenol-d6	99	9.0%	24-1	13	H	"	u	n	
Surrogate: Nitrobenzene-d5	76	0.0 %	23-1	20	"	"	#	,,	
Surrogate: 2-Fluorobiphenyl	91	60%	30-1	15	μ	,,	"	n	
Surrogate: 2,4,6-Tribromophenol	5.	5.0 %	19-1	22	**	n	n	#	
Surrogate: Terphenyl-dl4	Q.	40%	18-1		u	"	*	H	



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

Reported: 04/22/03 15:54

Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

Analyte	Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W&A HVW3-11 (0303079-11) Soil	Sampled: 03/04/03 15:3	0 Rec	eived: 03/	07/03 09:4	5				
Acenaphthene	ND	0.20	mg/kg	1	B3C1110	03/10/03	03/11/03	EPA 8270C	
Acenaphthylene	ND	0.20	**	11	Ħ	21	14	17	
Anthracene	ND	0.20	**	**	**	16	11	tí	
Benzidine	ND	0.20	n	#	11	16	n	B	
Benzo (a) anthracene	ND	0.20	н	н	#	**	II	et	
Benzo (b) fluoranthene	ND	0.20	11	n	11	н	и	U+	
Benzo (k) fluoranthene	ND	0.20	12	Ħ	**	U	"	ø	
Benzo (a) pyrene	ND	0.20	**	11	n	11	"	n	
Benzo (g,h,i) perylene	ND	0.20	11	11	it	H	**	11	
Benzyl alcohol	ND	0.20	**	Ħ	10	Ħ	H	rs	
Bis(2-chloroethyl)ether	ND	0.20	**	11	Ħ	If	"	**	
Bis(2-chloroethoxy)methane	ND	0.20	n	11	Ħ	11	**	16	
Bis(2-ethylhexyl)phthalate	ND	0.20	н	n	11	*	н	*t	
Bis(2-chloroisopropyl)ether	ND	0.20	"	n	**	51	u	er	
4-Bromophenyl phenyl ether	ND	0.20	"	11	*	n	H	14	
Butyl benzyl phthalate	ND	0.20	"	"	н	H	11	H	
4-Chloroaniline	ND	0.20	u	"	10	"	н	If	
2-Chlorophenol	ND	0.20	#	11	**	11	"	я	
4-Chloro-3-methylphenol	ND	0.20	н	и	**	"	"	11	
2-Chloronaphthalene	ND	0.20)1	et	11	**	Ħ	er .	
4-Chlorophenyl phenyl ether	ND	0.20	**	и	**	11	I†	11	
Chrysene	ND	0.20	ti.	17	n	**	ч	n	
Dibenz (a,h) anthracene	ND	0.20	"	H	**	11	it	ff.	
Dibenzofuran	ND	0.20	"	u	11	91	#	и	
1,3-Dichlorobenzene	ND	0.20	11	12	17	11	и	0	
1,2-Dichlorobenzene	ND	0.20	sŧ	Ħ	**	ц	n	19	
1,4-Dichlorobenzene	ND	0.20	11	ts	n	11	ч	u	
3,3'-Dichlorobenzidine	ND	0.20	R	st	u	"	H.	я	
2,4-Dichlorophenol	ND	0.20	**	**	#1	н	18	22	
Diethyl phthalate	ND	0.20	"	н	"	**		**	
2,4-Dimethylphenol	ND	0.20	Ħ	**	н	76	W	u	
Dimethyl phthalate	ND	0.20	"	n		41	**	и	
Di-n-butyl phthalate	ND	0.20	**	11	11	1)	n	н	
2,4-Dinitrophenol	ND	0.20	"	**	**	ıt	17	н	
4,6-Dinitro-2-methylphenol	ND	0.20	**	n	11	**	п	#	
2,4-Dinitrotoluene	ND	0.20	11	**	**	n	и	It	
2,6-Dinitrotoluene	ND	0.20	**	"	**	11	**	n	
Di-n-octyl phthalate	ND	0.20	10	n	ii .	**	tı	**	
1,2-Diphenylhydrazine	ND	0.20	11	34	u	ıı	н	*1	
Fluoranthene	ND	0.20	11	"	**	11	41	и	
Fluorene	ND	0.20	**	11	11	n	н	u	



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

Reported: 04/22/03 15:54

Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

Analyte .	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W&A HVW3-11 (0303079-11) Soil	Sampled: 03/04/03	15:30 Rec	eived: 03/	07/03 09:4	15				
Hexachlorobenzene	ND	0.20	mg/kg	1	B3C1110	03/10/03	03/11/03	EPA 8270C	
Hexachlorobutadiene	ND	0.20	**	н	11	**	11	19	
Hexachlorocyclopentadiene	ND	0.20	n	ŧı	14	a	11	it.	
Hexachloroethane	ND	0.20	ts	H	**	**	**	н	
Indeno (1,2,3-cd) pyrene	ND	0.20	18	"	**	н		u	
Isophorone	ND	0.20	Ħ	**	н	н	**	•	
2-Methylnaphthalene	ND	0.20	"	n	#	H	Ħ	11	
2-Methylphenol	ND	0.20	a	н	17	u) f	н	
4-Methylphenol	ND	0.20	Ħ	Ħ	"	ti	11	n	
Naphthalene	ND	0.20	н	. 11	Ħ	Ħ	н	er .	
2-Nitroaniline	ND	0.20	**	**	44	W	ы	11	
3-Nitroaniline	ND	0.20	n	II.	11	"	19	n.	
4-Nitroaniline	ND	0.20	H	41	"	и,	а	19	
Nitrobenzene	ND	0.20	н	16	B	**	n	11	
2-Nitrophenol	ND	0.20	**	"	11	11	59	TI	
4-Nitrophenol	ND	0.20	13	н	31	"	D	n	
N-Nitrosodimethylamine	ND	0.20	u	**	"	n		. •	
N-Nitrosodiphenylamine	ND	0.20	11	"	n	44	13	tr	
N-Nitrosodi-n-propylamine	ND	0.20	11	#	н	#	Ħ	**	
Pentachlorophenol	ND	0.20	**	н		0	18	н	
Phenanthrene	ND	0.20	11	**	ti	**	"	11	
Phenol	ND	0.20	w	u	19	19	. н	•	
Pyrene	ND	0.20	Ħ	11	**	ŧı	51	n	
1,2,4-Trichlorobenzene	ND	0.20	n	и	**	11	11	10	
2,4,5-Trichlorophenol	ND	0.20	**	н	rt .	tf	**	n	
2,4,6-Trichlorophenol	ND	0.20		n	H	Ħ	и	ja	
Surrogate: 2-Fluorophenol ·		300%	25-	121	#	11	"	"	
Surrogate: Phenol-d6		109 %	24-	113	Ħ	"	"	*	
Surrogate: Nitrobenzene-d5		31.0 %	23-	120	"	tt .	**	н	
Surrogate: 2-Fluorobiphenyl		68.0 %	30-	115	n	"	"	**	
Surrogate: 2,4,6-Tribromophenol		44.0 %	19-	122	et	"	"	n	
Surrogate: Terphenyl-dl4		44.0 %	18-	137	"	"	"	"	



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

Reported: 03/18/03 15:25

Metals by EPA 6000/7000 Series Methods - Quality Control Sierra Analytical Labs, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B3C1326 - EPA 3050B										
Blank (B3C1326-BLK1)				Prepared:	03/13/03	Analyzed	1: 03/17/03			
Lead	ND	2.8	mg/kg							
LCS (B3C1326-BS1)				Prepared:	03/13/03	Analyzeo	1: 03/17/03			
Lead	107	2.8	mg/kg	100		107	80-120			
Matrix Spike (B3C1326-MS1)	Sour	rce: 030307	8-01	Prepared:	03/13/03	Analyzeo	i: 03/17/03			
Lead	97.1	2.8	mg/kg	91.0	3.5	103	70-130			
Matrix Spike Dup (B3C1326-MSD1)	Sour	rce: 030307	8-01	Prepared:	03/13/03	Analyzed	i: 03/17/03			
Lead	105	2.8	mg/kg	95.0	3.5	107	70-130	7.82	20	
Batch B3C1405 - EPA 3010A										
Blank (B3C1405-BLK1)				Prepared	& Analyz	ed: 03/14/	03			
Lead	ND	0.020	mg/L					· · · · · · · · · · · · · · · · · · ·		
LCS (B3C1405-BS1)				Prepared	& Analyz	ed: 03/14/	03			
Lead	0.191	0.020	mg/L	0.200		95.5	80-120			
Matrix Spike (B3C1405-MS1)	Sour	rce: 030307	8-09	Prepared a						
Lead	0.195	0.020	mg/L	0.200	ND	97.5	75-125			
Matrix Spike Dup (B3C1405-MSD1)	Sour	rce: 030307	8-09	Prepared a	& Analyz	ed: 03/14/	03			
Lead	0.194	0.020	mg/L	0.200	ND	97.0	75-125	0.514	20	



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

Reported: 03/18/03 15:25

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3C1110 - EPA 3550B Solid Ext										
Biank (B3C1110-BLK1)				Prepared:	03/10/03	Analyzed	: 03/11/03			
Acenaphthene	ND	1.0	mg/kg							
Acenaphthylene	ND	1.0	π							
Anthracene	ND	1.0	ti							
Benzidinc	ND	1.0	m							
Benzo (a) anthracene	ND	1.0	**							
Benzo (b) fluoranthene	ND	1.0	**							
Benzo (k) fluoranthene	ND	1.0	Ħ							
Benzo (a) pyrene	ND	1.0	Ħ							
Benzo (g,h,i) perylene	ND	1.0	n							
Benzyl alcohol	ND	1.0				•				
Bis(2-chloroethyl)ether	ND	1.0	*							
Bis(2-chloroethoxy)methane	ND	1.0	п							
Bis(2-ethylhexyl)phthalate	ND	1.0	n							
Bis(2-chloroisopropyl)ether	ND	1.0	**							
4-Bromophenyl phenyl ether	ND	1.0								
Butyl benzyl phthalate	ND	1.0	**							
4-Chloroaniline	ND	1.0	*							
2-Chlorophenol	ND	0.1								
4-Chloro-3-methylphenol	ND	1.0	**							
2-Chloronaphthalene	ND	1.0	*							
4-Chlorophenyl phenyl ether	ND	1.0	15							
Chrysene	ND	1.0	n		•					
Dibenz (a,h) anthracene	ND	1.0								
Dibenzofuran	ND .	1.0	Ħ							
1,3-Dichlorobenzene	ND	1.0								
1.2-Dichlorobenzene	ND	1.0						-		
1,4-Dichlorobenzene	ND	1.0								
3,3'-Dichlorobenzidine	ND	1.0	н							
2,4-Dichlorophenol	ND	1.0	•							
Diethyl phthalate	ND	1.0	**							
2,4-Dimethylphenol	ND	1.0	*							
Dimethyl phthalate	ND	1.0	Ħ							
Di-n-butyl phthalate	ND	1.0	n							
2,4-Dinitrophenol	ND	1.0	**							
4,6-Dinitro-2-methylphenol	ND	1.0	**							
2,4-Dinitrotoluene	ND	1.0	n							
2,6-Dinitrotoluene	ND	1.0	*							
10 Sugarouseur	140	1.0								



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

Reported: 03/18/03 15:25

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Lunit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3C1110 - EPA 3550B Solid Ext										
Blank (B3C1110-BLK1)				Prepared:	03/10/03	Analyzed	: 03/11/03			
Di-n-octyl phthalate	ND	1.0	mg/kg							
1,2-Diphenylhydrazine	ND	1.0	#							
Fluoranthene	ND	1.0	н							
Fluorene	ND	1.0	#							
Hexachlorobenzene	ND	1.0	Ħ							
Hexachlorobutadierie	ND	1.0	**							
Hexachlorocyclopentadiene	ND	1.0	**			•				
Hexachloroethane	ND	1.0	₩							
Indeno (1,2,3-cd) pyrene	ND	1.0	11							
Isophorone	ND	1.0	#			,				
2-Methylnaphthalene	ND	1.0	n							
2-Methylphenol	ND	1.0	u							
4-Methylphenol	ND	1.0	m							
Naphthalene	ND	1.0	n							
2-Nitroaniline	ND	1.0	Ħ							
3-Nitroaniline	ND	1.0								
4-Nitroaniline	ND	1.0	Ħ							
Nitrobenzene	ND	1.0	H							
2-Nitrophenol	ND	1.0	n							
4-Nitrophenol	ND	1.0	n							
N-Nitrosodimethylamine	ND	1.0	*							
N-Nitrosodiphenylamine	ND	1.0	*							
N-Nitrosodi-n-propylamine	ND	1.0								
Pentachlorophenol	ND .	1.0								
Phenanthrene	ND	1.0	er er							
Phenol	ND	1.0								
Pyrene	ND	1.0	Ħ							
1,2,4-Trichlorobenzene	ND	1.0	**							
2,4,5-Trichlorophenol	ND	1.0	•							
2,4,6-Trichlorophenol	ND.	1.0	"							
Surrogate: 2-Fluoraphenol	0.870		*	1.00		87.0	25-121	······································		
Surrogate: Phenol-d6	0.750		"	1.00		75.0	24-113			
Surrogaie: Nitrobenzene-d5	0.900		*	1.00		90.0	23-120			
Surrogate: 2-Fluorobiphenyl	0.900		•	1.00		90.0	30-115			
Surrogate: 2,4,6-Tribromophenol	0.800		*	1.00		80.0	19-122			
Surrogate: Terphenyl-dl4	0.700		*	1.00		70.0	18-137			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Hector Garcia

Reported: 03/18/03 15:25

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3C1110 - EPA 3550B Solid Ex	t									
LCS (B3C1110-BS1)				Prepared:	03/10/03	Analyzeo	1: 03/11/03			
Acenaphthene	1.40	1.0	mg/kg	2.00		70.0	47-145			
2-Chlorophenol	2.30	1.0	n	2.00		115	23-134			
4-Chloro-3-methylphenol	1.30	1.0	n	1.50		86.7	22-147			
,4-Dichlorobenzene	0.800	1.0	Ħ	1.00		80.0	20-124			
,4-Dinitrotoluene	1.10	1.0	n	1.00		110	39-139			
-Nitrophenol	ND	1.0	n	1.00			0-132			
N-Nitrosodi-n-propylamine	ND	1.0		1.00			0-230			
Pentachlorophenol	1.60	1.0	11	1.00		160	14-176			•
Phenol	1.80	1.0	n	2.00		90.0	5-112			
Уутепе	2.10	1.0	*	2.00		105	52-115			
,2,4-Trichlorobenzene	1.10	1.0	19	1.00		110	44-142			
Matrix Spike (B3C1110-MS1)	Sot	ırce: 030307	8-03	Prepared:	03/10/03	Analyzed	1: 03/11/03			
cenaphthene	1.20	1.0	mg/kg	2.00	ND	60.0	47-145			
-Chlorophenol	2.00	1.0	17	2.00	ND	100	23-134			
-Chloro-3-methylphenol	1.50	1.0	**	1.50	ND	100	22-147			
,4-Dichlorobenzene	0.600	1.0	*	1.00	ND	60.0	20-124			
2,4-Dinitrotoluene	0.800	1.0	w	1.00	ND	80.0	39-139			
-Nitrophenol	ND	1.0	Ħ	1.00	ND		0-132			
N-Nitrosodi-n-propylamine	ND	1.0	n	1.00	ND		0.230			
Pentachlorophenol	1.60	1.0	ti	1.00	ND	160	14-176			
Phenol	2.10	. 1.0	•	2.00	ND	105	5-112			
Pyrene	1.70	1.0	#	2.00	ND	85.0	52-115			
,2,4-Trichlorobenzene	1.00	1.0	n	1.00	ND	100	44-142			
Matrix Spike Dup (B3C1110-MSD1)	Sou	rce: 030307	8-03	Prepared:	03/10/03	Analyzed	l: 03/11/03	_		4
cenaphthene	1.10	1.0	mg/kg	2.00	ND	55.0	47-145	8.70	30	
-Chlorophenol	1.80	1.0	**	2.00	ND	90.0	23-134	10.5	30	
-Chloro-3-methylphenol	1.40	1.0	n	1.50	ND	93.3	22-147	6.90	30	
,4-Dichlorobenzene	0.500	1.0	**	1.00	ND	50.0	20-124	18.2	30	
,4-Dinitrotoluene	1.00	1.0	, n	1.00	ND	100	39-139	22.2	30	
-Nitrophenol	ND	1.0	n	1.00	ND		0-132		30	
V-Nitrosodi-n-propylamine	ND	1.0	*	1.00	ND		0-230		30	
entachlorophenol	1.60	1.0	n	1.00	ND	160	14-176	0.00	30	
Phenol	1.80	1.0	Ħ	2.00	ND	90.0	5-112	15.4	30	
Pyrene	1.90	1.0	н	2.00	ND	95.0	52-115	11.1	30	
2,4-Trichlorobenzene	0.900	1.0	*	1.00	ND	90.0	44-142	10.5	30	



Project: Lynwood Springs

Project Number: WAI-007

Project Manager: Hector Garcia

Reported: 03/18/03 15:25

Notes and Definitions

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



SIERRA ANALYTICAL

TEL: 949•348•9389 FAX: 949•348•9115

CHAIN OF CUSTODY RECORD

Date. 316103 Page 1 of 2

26052 Merit Circle • Suite 105 • Laguna Hills, CA • 92653

Lab Project ID: 030307**9**

Chent Address: Hy Pini C	Basse	_	Che	ent Project ID	Bymuro	d Spring	8		A na	lyses	Req	ueste	d			
Chent Address: 110 Pine	220	Suite 9	W W	AI-WT	7 ()	, ,		M	>		T					
Longber	ush,	CA 908	<u> </u>					E .								
			Tu	m Around ne Requested:	☐ Immediate	24 Hour		100								
Chent Tel No: (562) 495-	5777		"	ne nequesieu.	48 Hour	72 Hour	19	17								
Client Fax No (STW) 495			4 Day	S Day	2	02										
Chent Proj Mgi Nector			☐ Normal	Mobile	1/2	3						-				
	Sierra				Container	No. of	\mathcal{Q}	2								
Client Sample ID	Sample No.	Date/Time	Matrix	Preservatives	 	Containers	-						1	\dashv	\dashv	Comments
WASB 1-1	01	74/03 0810	<u>S</u>		B ross	BI	_	X _	-	-				_	_	
WEASBI-6	02	0825	<u>S</u>	ļ			X		<u> </u>				4	_	\perp	
WASBI-II	03	0835	<u>S</u>				X						1	\perp	\perp	
NEASBI-255	04	0940	ی		للے		X									
WEA HVWI-2	05	1140	S			<u> </u>		X								
WEAHVWI-6	06	1200	S				X	星								
WEAHVWI-11	07	1215	S				X									
WEA HVW1-23	08	1240	S			i	X							\Box		
WA HV W3-25	09	1455	S					X								
WEA HV W3-6	10	1505	S			i	X								\Box	
Sampler Signature		Shipped	Via							Total	Numl	ber of C	'ontain	ers		Sample Disposal:
							1					to Labo			- [•
Punted Name		(Carrier/	Waltell No.1	0_0_	18	7.7.0.0		tale an of				is chain of cu	nust Com		_	Return to Client
Retiniquished By Date Received By						3.703		horization to	periorm	the analyse	s specified	above under ting between	SIERRAS	Terms ar	nd	Lab Disposal*
Company	may		19:45	•	Samples der	ermined t	o be hazare	hius by SIE	ERRA will be	returned to	CHLN	П	Archivemos			
Relanquished By	Ву			Date	ئے [13%		Total	Num	ber of C	Contain	ers		Other		
Соправу Типе. Соправу					-	Time	1	19		Rece	ived b	y Labo	ratory			
Relinquish d By	В			Date	FO	R LAB	ORAT	ORY U	SE ON	ILY - Şa	mple R	eceipt	i Co	nditions:		
- Maria									☑ Chilled - Temp (°C) 2.8°C							
Special Instructions Time. Company						Tune		Sample :							'erifii	ed By
1 1									Properly Labeled Other Appropriate Sample Container Storage Location 345 / 2141							
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14208

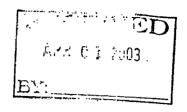
2852 Atton Ave , Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228

1014 E. Cooley Dr., Sulte A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1048 16525 Sherman Way Sulle C 11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843 2465 W 12th St., Sulle 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

CHAIN OF CUSTODY FORM 0303019

9484 Chesapeake Dr., Sulta 805, San Diego. CA 92123	(619) 505-95	96 FAX (619)	202-8068	• • • • • • • • • • • • • • • • • • • •	1111 01		. — —					•			rage or		
Client Name/Address Windfield + asso 110 Plin arc, Sc. Froject Manager Hester Carcin	۶C,		Project/	PO Number:					Anal	ysis Req	uired						
110 Phon are Se	ute !	900	2 g	nwood			3	7									
Lone Beach C	A 90	802	WF	7I-001			rate										
Project Manager		<u> </u>	Phone N	lumber:		19	130				·	·					
Hechir baren	•		(562)495-5777			2	3										
Sampler.			Fax Nur	nber:		13											
			1)495-50			1/1										
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	82 WC	6								Special Instructions		
WZA HV I 03-11 WZA-ER-Y	S	Bruss		3/4/03 1530		X									1/		
4)20-ER-11	W	Plastic	1	3/4/03 /30	Je		X _								12		
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					1000	are	及			9:	15		day		72 hours		
Relinquished By	-	Date /Time	:		Received by:			Date /Ti					ırs		5 days		
Dalas wheel D		<u> </u>			Danis, die i			D-4: #				48 hours normal					
Relinquished By		Date /Time	1		Received in Lai						-						
Note: By relinquishing samples to F	Del Mar A	nalidiani al			1				,			mact			on ice		





28 March 2003

Matthew Winefield Winefield & Associates 110 Pine Ave, Suite 900 Long Beach, CA 90802

RE:Lynwood Springs

Work Order No.:

0302354

Attached are the results of the analyses for samples received by the laboratory on 02/28/03 17:02.

The samples were received by Sierra Analytical Labs, Inc. with a chain of custody record attached or completed at the submittal of the samples.

The analyses were performed according to the prescribed method as outlined by EPA, Standard Methods, and A.S.T.M.

The remaining portions of the samples will be disposed of within 30 days from the date of this report. If you require any additional retaining time, please advise us.

Sincerely,

Richard K. Forsyth

no I Fruth

Laboratory Director



Winefield & Associates 110 Pine Ave, Suite 900

Long Beach CA, 90802

Project: Lynwood Springs

Project Number: WAI-007

Project Manager: Matthew Winefield

Reported: 03/28/03 16:48

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SR14-5	0302354-01	Soil	02/26/03 11:20	02/28/03 17:02
SR14-10	0302354-02	Soil	02/26/03 11:30	02/28/03 17:02





Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Matthew Winefield

Reported: 03/28/03 16:48

Semivolatile Organic Compounds by EPA Method 8270C Sierra Analytical Labs, Inc.

		Sterra Al	шуисы	Laus, I	nc.				
Anaiyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	No
SR14-5 (0302354-01) Soil	Sampled: 02/26/03 11:20	Received: 02	/28/03 17:	:02					D
Acenaphthene	ND	1.0	mg/kg	5	B3C0417	03/03/03	03/04/03	EPA 8270C	
Acenaphthylene	ND	1.0	R			Ħ		*	
Anthracene	ND ND	. 1.0	•	*	*	7	*	M. W. au	
Benzidine	ND	1.0		•	#				
Benzo (a) anthracene	ND	1.0	•	•	•	#	*	#	
Benzo (b) fluoranthene	ND	1.0			w	n	*		
Benzo (k) fluoranthene	ND	1.0	•	*	#	e	#	я	
Benzo (a) pyrene	ND	1.0	•	m		•		•	
Benzo (g,h,i) perylene	ND	1.0		-	*	Ħ	*		
Benzyl alcohol	ND	1.0					*	*	
Bis(2-chloroethyl)ether	ND	1.0	#	Ħ		# ,	*	*	
Bis(2-chloroethoxy)methan-	e ND	1.0	Ħ	**	*	, #	n	#	
Bis(2-ethylhexyl)phthalate	ND	1.0	*	W	n	•	*		
Bis(2-chloroisopropyl)ether	ND	1.0	¥	#	**		77	*	
4-Bromophenyl phenyl ethe	nD ND	1.0	19						
Butyl benzyl phthalate	ND	1.0	H	*	•			•	
4-Chloroaniline	ND	1.0	w	**	*	*	n	•	
2-Chlorophenol	ND	1.0	ĸ	n	11	*	*		
4-Chloro-3-methylphenol	ND	1.0		*	Ħ	17	n	*	
2-Chloronaphthalene	ND	1.0			•	*	n	**	
4-Chlorophenyl phenyl ethe	T ND	1.0		**	*	•	•		
Chrysene	ND	1.0	4	*				•	
Dibenz (a,h) anthracene	ND	1.0			*		*	я	
Dibenzofuran	ND	1.0		•	*				
1,3-Dichlorobenzene	ND	1.0			*	•			
1,2-Dichlorobenzene	ND	1.0	*	•	•		•		
1,4-Dichlorobenzene	ND	1.0	#	•		*	•	17	
3,3'-Dichlorobenzidine	ND	1.0		*			•	*	
2,4-Dichlorophenol	ND	1.0		*		*	•	•	
Diethyl phthalate	ND	1.0		*	*	*		•	
2,4-Dimethylphenol	ND	1.0		•		N	*	n	
Dimethyl phthalate	ND	1.0			*			#	
Di-n-butyl phthalate	ND	1.0		*		m	*		
2,4-Dinitrophenol	ND	1.0	*				*	•	
4,6-Dinitro-2-methylphenol		1.0			*	*			
2,4-Dinitrotoluene	ND	1.0	*			e			
2,6-Dinitrotoluene	ND	1.0	N		•	=		•	
Di-n-octyl phthalate	ND	1.0		•		*			
1,2-Diphenylhydrazine	ND	1.0			•	Ħ			
Fluoranthene	· ND	1.0							
					 #		- ;		
Fluorene	ND	1.0		•	-		•	*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Project: Lynwood Springs

Project Number: WAI-007

Project Manager: Matthew Winefield

Reported: 03/28/03 16:48

Page 3 of 9

Semivolatile Organic Compounds by EPA Method 8270C Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
SR14-5 (0302354-01) Soil	Sampled: 02/26/03 11:20	Received: 02	/28/03 17	:02					D
Hexachlorobenzene	ND	1.0	mg/kg	5	B3C0417	03/03/03	03/04/03	EPA 8270C	
Hexachlorobutadiene	ND	1.0	Ħ	#		**	•	•	
Hexachlorocyclopentadiene	ND	1.0	*	n	#	•	m	n	
Hexachloroethane	ND	1.0		H	*	يها البقو ١٠٥٠	77	*	
Indeno (1,2,3-cd) pyrene	ND	1.0	#	#	Ħ	*	**	*	
Isophorone	ND	1.0	*		*	π.	Ħ	n	
2-Methylnaphthalene	ND	1.0	*		•	*		*	
2-Methylphenol	ND	1.0		W	#	*	*	. *	
4-Methylphenol	ND	1.0	*		n	-			
Naphthalene	ND	1.0		W	m	•	Ħ	н	
2-Nitroaniline	ND	1.0	•	¥	*	* .	•		
3-Nitroaniline	ND	1.0			**	. •	*	*	
4-Nitroaniline	ND	1.0		Ħ		•		n	
Nitrobenzene	ND	1.0	•	*	**		#	#	
2-Nitrophenol	ND	1.0		*	*			#	
4-Nitrophenol	ND	1.0		*	#	*	•		
N-Nitrosodimethylamine	ND	1.0	•	•	*		•	Ħ	
N-Nitrosodiphenylamine	ND	1.0	•	**	**	*		*	
N-Nitrosodi-n-propylamine	ND	1.0	*	*	•		*	•	
Pentachlorophenol	ND	1.0				*	•	•	
Phenanthrene	ND	1.0	#		Ħ	n	*	**	
Phenoi	ND	1.0	•	•	• '		*	•	
Pyrene	ND	0.1	•	*	•		•		
1,2,4-Trichlorobenzene	ND	1.0	**		•			•	
2,4,5-Trichlorophenol	ND	1.0	=	•		**	*	• ,	
2,4,6-Trichlorophenol	ND	1.0	*	×	**	•	Ħ		
Surrogate. 2-Fluorophenol		49.0 %	25	121	#	"	#	#	
Surrogate: Phenol-d6		37.5 %	24	113	"	"	*	,,	
Surrogate: Nitrobenzene-d5		65.0 %	23	120	•	#	n	a	
Surrogate. 2-Fluorobiphenyl		50.0 %	30	115	"	•	#	н	
Surrogate: 2,4,6-Tribromoph	enol	55.0 %	19-	122	#	*	*	#	
Surrogate: Terphenyl-dl4		44.0 %	18	137	**	,,	n	*	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety

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Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Matthew Winefield

Reported: 03/28/03 16:48

Semivolatile Organic Compounds by EPA Method 8270C Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	N
SR14-10 (0302354-02) Soil	Sampled: 02/26/03 11:30	Received: 0	2/28/03 17	:02	***************************************				
Acenaphthene	ND	0.20	mg/kg	1	B3C0417	03/03/03	03/04/03	EPA 8270C	
Acenaphthylene	ND	0.20	ĸ	•	#	н		n	
Anthracene	ND	0.20	#		Ħ	#		•	
Benzidine	ND	0.20	ye e ^{re} car	,	7			•	
Benzo (a) anthracene	ND	0.20	*	H	*	*	N.	•	
Benzo (b) fluoranthene	ND	0.20	#	*	*	Ħ	*	**	
Benzo (k) fluoranthene	ND	0.20	#	**	Ħ	*	•	*	
Benzo (a) pyrene	ND	0.20			•	•	-	. **	
Benzo (g,h,1) perylene	ND	0.20	H	¥	π	*	-	*	
Benzyl alcohol	ND	0.20		11	*	*	*	*	
Bis(2-chloroethyl)ether	ND	0.20	Ħ	Ħ		* .	•	•	
Bis(2-chloroethoxy)methane	ND	0.20	*	#	*	, * ,	•	•	
Bis(2-ethylhexyl)phthalate	ND	0.20	**	#	*	*		•	
Bis(2-chlorosopropyl)ether	ND	0.20	Ħ	=	*	•	**	•	
4-Bromophenyl phenyl ether	ND	0.20	*		#	*	•	•	
Butyl benzyl phthalate	ND	0.20	•	*	•	•	#	*	
4-Chloroaniline	ND	0.20	*	*	#		=		
2-Chlorophenol	ND	0.20	#	•	•	•	•		
4-Chloro-3-methylphenol	ND	0.20	#	H	n	*	•		
2-Chloronaphthalene	ND	0.20	#		•	•			
4-Chiorophenyl phenyl ether	ND	0.20	Ħ	*	•		•		
Chrysene	ND	0.20	w	n	#	*	•	•	
Dibenz (a,h) anthracene	ND	0.20			*	•		•	
Dibenzofuran	ND	0.20	#	•	•			•	
1,3-Dichlorobenzene	ND	0.20		*		7	•	*	
1,2-Dichlorobenzene	ND	0.20		•	•	*	79	*	
1,4-Dichlorobenzene	ND	0.20	*	•	77	#			
3,3'-Dichlorobenzidine	ND	0.20	*		*	*	,	•	
2,4-Dichlorophenol	ND	0.20		*	W	*	•	# .	
Diethyl phthalate	ND	0.20		*	*	w	•		
2,4-Dimethylphenol	ND	0.20			Ħ	*	*	#	
Dimethyl phthalate	ND	0.20			*		•	•	
Di-n-butyl phthalate	ND	0.20	n		*	•		*	
2,4-Dinitrophenol	ND	0.20		*	*	*	*		
4,6-Dinitro-2-methylphenol	ND	0.20	n	*	*		•	*	
2,4-Dinitrotoluene	· ND	0.20	•	*		#	*		
2,6-Dinitrotoluene	ND	0.20				•		•	
Di-n-ocryl phthalate	ND	- 0.20		•	*		*		
1,2-Diphenylhydrazine	ND	0.20	*	*	*		*	*	
Fluoranthene	ND	0.20	7			*			
Fluorene	ND	0.20	•				_	_	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety

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Project Lynwood Springs

Project Number: WAI-007

Project Manager: Matthew Winefield

Reported: 03/28/03 16:48

Semivolatile Organic Compounds by EPA Method 8270C

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	'Analyzed	Method	No
SR14-10 (0302354-02) Soll	Sampled: 02/26/03 11:30	Received: 0	2/28/03 1	7:02					
Hexachlorobenzene	ND	0.20	mg/kg	ī	B3C0417	03/03/03	03/04/03	EPA 8270C	
Hexachlorobutadiene	ND	0.20		#	•	#	*	*	
Hexachlorocyclopentadiene	ND	0.20	•	*			×	п	
Hexachloroethane	ND ***	0.20	•	,,		*	•	*	
Indeno (1,2,3-cd) pyrene	ND	0.20	•	*	•	#	Ħ	₩	
Isophorone	ND	0.20		*	n	Ħ	**	n	
2-Methylnaphthalene	ND	0.20		*	*	n	-		
2-Methylphenol	ND	0.20	Ħ	*		•	*	#	
4-Methylphenol	ND	0.20		*	w	¥		₩	
Naphthalene	ND	0.20	*		*	•		4	
2-Nitroaniline	ND	0.20	•	•	*	•		*	
3-Nitroanilme	ND	0.20	•	•		*	•	Ħ	
4-Nitroaniline	ND	0.20		Ħ		•	*	**	
Nitrobenzene	ND	0.20		*	•	•		Ħ	
2-Nitrophenol	ND	0.20	11		#	*		•	
4-Nitrophenol	ND	0.20		*	#	*	*	•	
N-Nitrosodimethylamine	ND	0.20	H	*	Ħ	*	•	*	
N-Nitrosodiphenylamine	ND	0.20		*		*	*	•	
N-Nitrosodi-n-propylamine	ND	0.20	Ħ			*	•	Я	
Pentachlorophenol	ND	0.20	*	•		•	•		
Phenanthrene	ND	0.20	**		**			π	
Phenol Phenol	ND	0.20			#		*	₩	
Pyrene	ND	0.20			Ħ	n	•		
1,2,4-Trichlorobenzene	ND	0.20	=		*	*			
2,4,5-Trichlorophenol	ND	0.20	*	*			*		
2,4,6-Trichlorophenol	ND	0.20	**	a	*	•	n	*	
Surrogate: 2-Fluorophenol		90.0 %	25-	121	"	*	*	*	
Surrogate: Phenol-d6		80.0 %	24-	113	•	"	Ħ	n	
Surrogate: Nitrobenzene-d5		90.0 %	23-	120	*	"	*	r r	
Surrogate: 2-Fluorobiphenyl		90.0 %	30-	115	*	#	#	*	
Surrogate: 2,4,6-Tribromopher	nol	90.0 %	19-	122	**	"	•	n	
Surrogate Terphenyl-dl4		87.0 %	18-		"	•	"	а	



Project: Lynwood Springs

Project Number: WAI-007

Project Manager: Matthew Winefield

Reported: 03/28/03 16:48

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sierra Analytical Labs, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B3C0417 - EPA 418.1										
Blank (B3C0417-BLK1)				Prepared:	03/03/03	Analyzed	: 03/04/03			
Acenaphthene	ND	0.20	mg/kg							
Acenaphthylene	ND	0.20	4						24.	
Anthracene	ND	0.20	#							
Benzidine	ND	0.20	•							
Benzo (a) anthracene	ND	0.20	*							
Benzo (b) fluoranthene	ND	0.20	*							
Benzo (k) fluoranthene	ND	0.20	*							
Benzo (a) pyrene	ND	0.20	п							
Benzo (g,h,i) perylene	ND	0.20	*			·.				
Benzyl alcohol	ND	0.20	×			,				
Bis(2-chloroethyl)ether	ND	0.20	*							
Bis(2-chloroethoxy)methane	ND	0.20	*							
Bis(2-ethylhexyl)phthalate	ND	0.20	n							
Bis(2-chloroisopropyl)ether	ND	0.20	•							
4-Bromophenyl phenyl ether	ND	0.20	•							
Butyl benzyl phthalate	ND	0.20	*							
4-Chloroaniline	ND	0.20	•							
2-Chlorophenol	ND	0.20	*							
4-Chloro-3-methylphenol	ND	0.20	*							
2-Chloronaphthalene	ND	0.20	*							
4-Chlorophenyl phenyl ether	ND	0.20	*							
Chrysene	ND	0.20	*							
Dibenz (a,h) anthracene	ND	0.20	**							
Dibenzofuran	ND	0.20	•							
1,3-Dichlorobenzene	ND	0.20	*							
1,2-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20	*							
3,3'-Dichlorobenzidine	ND	0.20	Ħ							
2,4-Dichlorophenol	ND	0.20	Ħ							
Diethyl phthalate	ND	0.20	•							
2,4-Dimethylphenol	ND	0.20								
Dimethyl phthalate	ND	0.20	•							
Di-n-buryl phthalate	ND	0.20	•							
2,4-Dinitrophenol	ND	0.20	Ħ							
4,6-Dinitro-2-methylphenol	ND	0.20								
2,4-Dinitrotoluene	ND	0.20								
2,6-Dinitrotoluene	ND	0.20								
may a seed to the total the seed of the se	174	0.20								



Project: Lynwood Springs

Project Number: WAI-007
Project Manager: Matthew Winefield

Reported: 03/28/03 16:48

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3C0417 - EPA 418.1										
Blank (B3C0417-BLK1)				Prepared:	03/03/03	Analyzed	: 03/04 /03			
Di-n-octyl phthalate	ND	0,20	mg/kg	C CONTRACTOR CONTRACTOR						
1,2-Diphenylhydrazine	ND	0.20	7	•		- 500				
Fluoranthene	ND	0.20	*							
Fluorene	ND	0.20	•							
Hexachlorobenzene	ND	0.20	*							
Hexachlorobutadiene	ND	0.20	Ħ							
Hexachlorocyclopentadiene	ND	0.20	*							
Hexachloroethane	ND	0.20								
Indeno (1,2,3-cd) pyrene	ND	0.20	•			•,				
Isophorone	ND	0.20				'				
2-Methylnaphthalene	ND	0.20	•							
2-Methylphenol	ND	0.20	•							
4-Methylphenol	ND	0.20		-						
Naphthalene	ND	0.20	*							
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20	*							
4-Nitroaniline	ND	0.20	Ħ							
Nitrobenzene	ND	0.20	*							
2-Nitrophenol	ND	0.20	**							
4-Nitrophenol	ND	0.20	**						,	
N-Nitrosodimethylamine	ND	0.20	Ħ							
N-Nitrosodiphenylamine	ND	0.20	*							
N-Nitrosodi-n-propylamıne	ND	0.20	*							
Pentachlorophenol	ND	0.20	Ħ							
Phenanthrene	ND	0.20	*							
Phenol	ND	0.20	#							
Pyrene	ND	0.20	n							
1,2,4-Trichlorobenzene	ND	0.20	*							
2,4,5-Trichlorophenol	ND .	0.20	*							
2,4,6-Trichlorophenol	ND	0.20	Ħ							
Surrogate 2-Fluorophenol	0.530		10	1.00		53.0	25-121			
Surrogaie. Phenol-d6	0.300		•	1.00		30.0	24-113			
Surrogate. Nitrobenzene-d5	0.390		*	1.00		39.0	23-120			
Surrogate: 2-Fluorobiphenyl	0.400		"	1.00		40.0	30-115			
Surrogate 2.4.6-Tribromophenol	0.400		**	1.00		40.0	19-122			
Surrogate: Terphenyl-dl4	0.500		•	1.00		50.0	18-137			



Project: Lynwood Springs

Project Number: WAI-007

Project Manager: Matthew Winefield

Reported: 03/28/03 16:48

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sierra Analytical Labs, Inc.

	-	Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Nou
Batch B3Ç0417 - EPA 418.1										
LCS (B3C0417-BS1)				Prepared:	03/03/03	Analyzeo	i: 03/04/03			
Acenaphthene	1.00	0.20	mg/kg	2.00		50.0	47-145			
2-Chlorophenol	1.40	0.20	7	2.00		70.0	23-134			
4-Chioro-3-methylphenol	1.40	0.20	•	1.50		93.3	22-147			
1,4-Dichlorobenzene	0.600	0.20	•	1.00		60.0	20-124			
2,4-Dinitrotoluene	0.800	0.20		1.00		80.0	39-139			
4-Nitrophenol	ND	0.20		1.00			0-132			
N-Nitrosodi-n-propylamine	ND	0.20		1.00			0-230			
Pentachlorophenol	1.40	0.20	•	1.00		140	14-176			
Phenol	1.10	0.20	n	2.00		55.0	5-112			
Рутепе	1.50	0.20	*	2.00		75.0	52-115			
1,2,4-Trichlorobenzene	1.00	0.20	#	1.00		100	44-142			
Matrix Spike (B3C0417-MS1)	Sou	rce: 030235	4-01	Prepared:	03/03/03	Analyzed	1: 03/04/03			
Acenaphthene	1.00	0.20	mg/kg	2.00	ND	50.0	47-145			
2-Chlorophenol	1,40	0.20	•	2.00	ND	70.0	23-134			
4-Chloro-3-methylphenol	1.40	0.20	**	1.50	ND	93.3	22-147			
1,4-Dichlorobenzene	0.400	0.20	*	1.00	ND	40.0	20-124			
2,4-Dinitrotoluene	0.400	0.20		1.00	ND	40.0	39-139			
4-Nitrophenol	ND	0.20	*	1.00	ND		0-132			
N-Nitrosodi-n-propylamine	ND	0.20	*	1.00	ND		0-230			
Pentachlorophenol	1.50	0.20	*	1.00	ND	150	14-176			
Phenol	1.20	0.20	*	2.00	ND	60.0	5-112			
Pyrene	2.00	0.20	•	2.00	ND	100	52-115			
1,2,4-Trichlorobenzene	0.600	0.20	H	1.00	ND	60.0	44-142			
Matrix Spike Dup (B3C0417-MSD1)	Sou	rce: 030 235	4-01	Prepared:	03/03/03	Analyzed	: 03/04/03			
Acenaphthene	1.00	0.20	mg/kg	2.00	ND	50.0	47-145	0.00	30	
2-Chlorophenol	1.40	0.20	•	2.00	ND	70.0	23-134	0.00	30	
4-Chloro-3-methylphenol	1.50	0.20	•	1.50	ND	100	22-147	6.90	30	
,4-Dichlorobenzene	0.500	0.20	*	1.00	ND	50.0	20-124	22.2	30	
2,4-Dinitrotoluene	0.500	0.20	*	1.00	ND	50.0	39-139	22.2	30	
l-Nitrophenol	ND	0.20	*	1.00	ND		0-132		30	
N-Nitrosodi-n- propylamine	ND	0.20		1.00	ND		0-230		30	
Pentachlorophenol	1.50	0.20	H	1.00	ND	150	14-176	0.00	30	
Pheno!	1.00	0.20		2.00	ND	50.0	5-112	18.2	30	
ryrene	1.50	0.20	*	2.00	ND	75.0	52-115	28.6	30	
2.4-Trichlorobenzene	0.800	0.20		1.00	ND	80.0	44-142	28.6	30	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety

26052 MERIT CIRCLE SUITE 105, LAGUNA HILLS, CALIFORNIA 92653 TELEPHONE: (949) 348-9389 FAX: (949) 348-9115 E-MAIL: SIERRALABS @ SIERALABS.NET



Project. Lynwood Springs

Project Number: WAI-007

Project Manager: Matthew Winefield

Reported: 03/28/03 16:48

Notes and Definitions

D-34 Sample diluted due to high levels of petroleum hydrocarbons.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

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SITE/STATION ADDRESS?	Beach BI	va. L	unwood,	CA.	RS						1					
CONSULTANT: Winefield & A			· · · · · · · · · · · · · · · · · · ·	1578-6788	CONTAINERS			٩								
ADDRESS: 7740 W. Marchas	ter Ave	# 205	<u></u>	, 5, 0 B, CO	Ę		*	Ŋ			l					
ADDRESS: 7740 W. Marchae Playa del Rey, PROJECT MGR. Matt Winefeld	CA 9020	13	FAX:(30	1578-9688												
PROJECT MGR. MAT WINEFUL	SAMPLER	IAME: She	ila Morris	sey	3 OF	8		temperat								
PROJECT # WAI - CO7 J	PHOJECT N	(5 Dave)	Turod St	ग्रान्द्ध्य	NUMBER	8260	.70	d								
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Printed Name Karga Fr	لك إيماح	(JEL	Printed Name:	JAN VALLE		SE	(A			Printe	ed Na	me.				
Signature Horent Com	Date/Time:	2/17/03	Signature:	DANLIDEL	<u>ر</u> 0	ate/Tii	ne:	7.2	7-03	s	ignati	nte.			Date/Time:	
		1130 Am	1						:02			-				

. . .



03 April 2003

Hector Garcia Winefield & Associates 110 Pine Ave, Suite 900 Long Beach, CA 90802

RE:Lynwood Springs

Work Order No.: 0302217

Attached are the results of the analyses for samples received by the laboratory on 02/17/03 13:45.

The samples were received by Sierra Analytical Labs, Inc. with a chain of custody record attached or completed at the submittal of the samples.

The analyses were performed according to the prescribed method as outlined by EPA, Standard Methods, and A.S.T.M.

The remaining portions of the samples will be disposed of within 30 days from the date of this report. If you require any additional retaining time, please advise us.

Sincerely,

Richard K. Forsyth

Laboratory Director



Project: Lynwood Springs

Project Number: C0492 + C0495
Project Manager: Hector Garcia

Reported: 04/03/03 14:44

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
W&A MW1-26	0302217-01	Soil	02/10/03 09:30	02/17/03 13:45
W&A MW4-25	0302217-02	Soil	02/10/03 14:50	02/17/03 13:45
W&A MW3-1	0302217-03	Soil	02/11/03 08:40	02/17/03 13:45
W&A MW3-25	0302217-04	Soil	02/11/03 09:20	02/17/03 13:45
W&A ER-2	0302217-05	Liquid	02/11/03 09:00	02/17/03 13:45



Project: Lynwood Springs
Project Number: C0492 + C0495

Project Manager: Hector Garcia

Reported: 04/03/03 14:44

Metals by EPA 6000/7000 Series Methods Sierra Analytical Labs, Inc.

		eporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
W&A MW1-26 (0302217-01) Soil	Sampled: 02/10/03 09:3	0 Rece	ived: 02/	17/03 13:4	5				
Lead	ND	1.3	mg/kg	1	B3B1933	02/19/03	02/20/03	EPA 6010B	
W&A MW4-25 (0302217-02) Soil	Sampled: 02/10/03 14:5	0 Rece	ived: 02/	1 <mark>7/03 1</mark> 3:4	5				
Lead	1.4	1.3	mg/kg	1	B3B1933	02/19/03	02/20/03	EPA 6010B	
W&A MW3-1 (0302217-03) Soil	Sampled: 02/11/03 08:40	Recei	ved: 02/1	7/03 13:45	;				
Lead	ND	1.4	mg/kg	1	B3B1933	02/19/03	02/20/03	EPA 6010B	
W&A MW3-25 (0302217-04) Soil	Sampled: 02/11/03 09:2	0 Rece	ived: 02/	17/03 13:4	5				
Lead	1.4	1.3	mg/kg	1	B3B1933	02/19/03	02/20/03	EPA 6010B	
W&A ER-2 (0302217-05) Liquid	Sampled: 02/11/03 09:00	Recei	ved: 02/1	7/03 13:45	5				
Lead	ND	0.020	mg/L	1	B3B2536	02/25/03	02/25/03	EPA 6010B	. , ,,,



Project: Lynwood Springs

Project Number: C0492 + C0495 Project Manager: Hector Garcia

Reported: 04/03/03 14:44

Metals by EPA 6000/7000 Series Methods - Quality Control Sierra Analytical Labs, Inc.

		Reporting		Spike	Source	,	%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Lunit	Notes
Batch B3B1933 - EPA 3050B										
Blank (B3B1933-BLK1)				Prepared:	02/19/03	Analyzed:	02/20/03			
Lead	ND	2.8	mg/kg							
LCS (B3B1933-BS1)				Prepared:	02/19/03	Analyzed:	02/20/03			
Lead	100	2.8	mg/kg	100		100	80-120			
Matrix Spike (B3B1933-MS1)	Sour	ce: 030221	6-05	Prepared:	02/19/03	Analyzed:	02/20/03			
Lead	105	2.8	mg/kg	98.9	7.0	99.1	70-130	•		
Matrix Spike Dup (B3B1933-MSD1)	Sour	ce: 030221	6-05	Prepared:	02/19/03	Analyzed:	02/20/03			
Lead	104	2.8	mg/kg	93.6	7.0	104	70-130	0.957	20	
Batch B3B2536 - EPA 3010A										
Blank (B3B2536-BLK1)				Prepared	& Analyz	ed: 02/25/0	3			
Lead	ND	0.020	mg/L		-					
.CS (B3B2536-BS1)				Prepared	& Analyz	ed: 02/25/0	3			
Lead	0.200	0.020	mg/L	0.200		100	80-120			
Matrix Spike (B3B2536-MS1)	Sour	ce: 030221	7-05	Prepared	& Analyz	ed: 02/25/0	3			
Lead	0.204	0.020	mg/L	0.200	ND	102	75-125	,		
Matrix Spike Dup (B3B2536-MSD1)	Sour	ce: 030221	7-05	Prepared	& Analyz	ed: 02/25/0	3			
Lead	0.202	0.020	mg/L	0.200	ND	101	75-125	0.985	20	• •



Project: Lynwood Springs

Project Number: C0492 + C0495
Project Manager: Hector Garcia

Reported: 04/03/03 14:44

Notes and Definitions

DET

Analyte DETECTED

ND

Analyte NOT DETECTED at or above the reporting limit

NR

Not Reported

dry

Sample results reported on a dry weight basis

RPD

Relative Percent Difference



SIERRA ANALYTICAL

TEL: 949 • 348 • 9389 FAX: 949 • 348 • 9115

CHAIN OF CUSTODY RECORD

Date: 2 1/7/03 Page 1 of 1

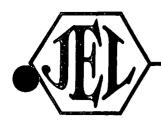
Lab Project ID. C0490 + C0495

26052 Merit Circle • Suite 105 • Laguna Hills, CA • 92653

Chem Winefield &	assoc			Cl	ient Project ID					Ana	lyses	s Rec	ques	ted			
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Chent Proj Mgr: Weclor (Sierra Sample No.	Date/T		Matrix	Preservatives	Container	No. of Containers	10/09									Comments
WEA MWI-26	01	2/10/0	2930	S	N/A	Bruss	1	X									
WEA MW4-25	02	2/18/03		S	N/x	Brass	1	X									
WEA MW 3-1	03	2/1/03	sse ,	S	N/A	Brass	1_1_	X									
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APPENDIX H

GROUNDWATER LABORATORY REPORTS AND C-O-C RECORDS



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY REPORT

Client: Client Address: WINEFIELD & ASSOCIATES, INC.

110 Pine Ave., Suite 900

Long Beach, CA 90802

Report Date:

03/24/03

JEL Ref. No.:

C-0530

Attn:

Hector Garcia

Date Sampled:

03/17/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 03/18/03 03/20/03-03/21/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

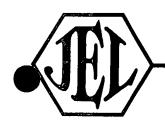
Water

ANALYSES REQUESTED

EPA 5035B/8260B- Volatile Organics by GC/MS + Oxygenates

Approval:

Steve Jones, Ph.D. Laboratory Manager



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client: Client Address: WINEFIELD & ASSOCIATES, INC.

110 Pine Ave., Suite 900

Long Beach, CA 90802

Report Date:

03/24/03

JEL Ref. No.:

C-0530

Attn:

Hector Garcia

Date Sampled:

03/17/03

Project:

Date Received:

03/18/03

Lynwood Springs

Date Analyzed:

03/20/03-03/21/03

Practical

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

Sample ID:	<u>MW-24</u>	<u>MW-23</u>	<u>MW-33</u>	<u>MW-13</u>	<u>MW-19</u>	Quantitation Limits	<u>Units</u>
Analytes:							
Benzene	ND	280*	1200*	ND	1300*	0.5	ug/L
Bromodichloromethane	ND	ND	ND	ND	ND	0.5	ug/L
Bromoform	ND	ND	ND	ND	ND	0.5	ug/L
Bromomethane	ND	ND	ND	ND	ND	0.5	ug/L
n-Butylbenzene	ND	19	22	ND	44	0.5	ug/L
sec-Butylbenzene	ND	16	16	ND	18	0.5	ug/L
tert-Butylbenzene	ND	ND	ND	ND	17	0.5	ug/L
Carbon tetrachioride	ND	ND	ND	ND	ND	0.5	ug/L
Chlorobenzene	ND	ND	ND	ND	ND	0.5	ug/L
Chloroethane	ND	ND	ND	ND	ND	0.5	ug/L
Chloroform	ND	ND	ND	ND	ND	0.5	ug/L
Chloromethane	ND	ND	ND	ND	ND	0.5	ug/L
2-Chlorotoluene	ND	ND	ND	ND	ND	0.5	ug/L
4-Chlorotoluene	ND	ND	14	ND	24	0.5	ug/L
Dibromochloromethane	ND	ND	ND	ND	ND	. 0.5	ug/L
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	0.5	ug/L
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	0.5	ug/L
Dibromomethane	ND	ND	ND	ND	ND	0.5	ug/L
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	0.5	ug/L
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	0.5	ug/L
1,4-Dichlorobenzenc	ND	ND	ND	ND	ND	0.5	ug/L
Dichlorodifluoromethane	ND	ND	ND	ND	ND	0.5	ug/L
1,1-Dichloroethane	ND	ND	ND	ND	ND	0.5	ug/L
1,2-Dichloroethane	ND	ND	ND	ND	ND	0.5	ug/L
1,1-Dichloroethene	ND	ND	ND	ND	ND	0.5	ug/L

ND = Not Detected



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/24/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

C-0530

Long Beach, CA 90802

Date Sampled:

03/17/03

Attn:

Hector Garcia

Date Received:

03/18/03

Project:

Lynwood Springs

Date Analyzed:

03/20/03-03/21/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

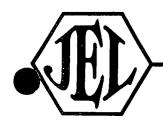
Physical State:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

			O'1.7 BU				
Sample ID:	<u>MW-24</u>	<u>MW-23</u>	<u>MW-33</u>	<u>MW-13</u>	<u>MW-19</u>	Practical Quantitation Limits	<u>Units</u>
Analytes:							
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	0.5	ug/L
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	0.5	ug/L
1,2-Dichloropropane	ND	ND	ND	ND	ND	0.5	ug/L
1,3-Dichloropropane	ND	ND	ND	ND	ND	0.5	ug/L
2,2-Dichloropropane	ND	ND	ND	ND	ND	0.5	ug/L
1,1-Dichloropropene	ND	ND	ND	ND	ND	0.5	ug/L
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	0.5	ug/L
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	0.5	ug/L
Ethylbenzene	12	22	85*	ND	600*	0.5	ug/L
Hexachlorobutadiene	ND	ND	ND	ND	ND	0.5	ug/L
Isopropylbezene	ND	14	18	ND	35	0.5	ug/L
4-Isopropyltoluene	ND	ND	ND	ND	17	0.5	ug/L
Methylene chloride	ND	ND	ND	ND	ND	0.5	ug/L
Naphthalenc	ND	ND	ND	ND	50	0.5	ug/L
n-Propylbenzene	ND	26	30	ND	120*	0.5	ug/L
Styre ne	ND	ND	ND	ND	ND	0.5	ug/L
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	0.5	ug/L
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	0.5	ug/L
Tetrachloroethylene	52	24	ND	ND	ND	0.5	ug/L
Tolu ene	1.2	61	14	ND	370*	0.5	ug/L
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	0.5	ug/L
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	0.5	ug/L
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	0.5	ug/L
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	0.5	ug/L
Trichloroethylene	24	ND	ND	28	ND	0.5	ug/L

ND = Not Detected



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/24/03

Client Address:

110 Pine Ave., Suite 900

Long Beach, CA 90802

JEL Ref. No.:

C-0530

Attn:

Hector Garcia

Date Sampled:

03/17/03

Project:

Date Received:

03/18/03

Lynwood Springs

Date Analyzed:

03/20/03-03/21/03

Dractical

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Water

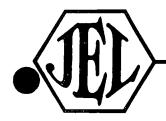
EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

Sample ID:	<u>MW-24</u>	<u>MW-23</u>	<u>MW-33</u>	MW-13	<u>MW-19</u>	Practical Ouantitation Limits	<u>Units</u>
Analytes:							
Trichlorofluoromethane	ND	ND	ND	ND	ND	0.5	ug/L
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	0.5	ug/L
1,2,4-Trimethylbenzene	ND	ND	16	ND	18	0.5	ug/L
1,3,5-Trimethylbenzene	ND	27	26	15	90	0.5	ug/L
Vınyl chloride	ND	ND	ND	ND	ND	0.5	ug/L
Xylen es	25	ND	ND	ND	210*	0.5	ug/L
MTBE	ND	3700*	110*	ND	ND	0.5	ug/L
Ethyl-tert-butylether	ND	ND	ND	ND	ND	0.5	ug/L
D1-1sopropylether	ND	ND	ND	ND	ND	0.5	ug/L
tert-amylmethylether	ND	ND	ND	ND	ND	0.5	ug/L
tert-Butylalcohol	ND	ND	ND	ND	ND	0.5	ug/L
Dilution Factor	1	1/10*	1/10*	1	1/10*		
Surrogate Recovery:						QC Limits	
Dibromofluoromethane	99%	103%	73%	96%	103%	60 - 140	
Toluene-d ₈	102%	100%	100%	103%	103%	60 - 140	
4-Bromofluorobenzene	110%	107%	94%	100%	108%	60 - 140	

ND

= Not Detected

= Dilutions for these compound(s); first for all others



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client: Client Address: WINEFIELD & ASSOCIATES, INC.

110 Pine Ave., Suite 900

Long Beach, CA 90802

Report Date:

03/24/03

JEL Ref. No.:

C-0530

Attn:

Hector Garcia

Date Sampled:

03/17/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 03/18/03 03/20/03-03/21/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

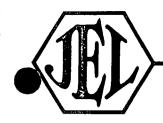
Physical State:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

			Oxygenates	
Sample ID:	<u>MW-6</u>	<u>MW-17</u>	<u>MW-4</u>	<u>Practical</u> <u>Quantitation</u> <u>Units</u> <u>Limits</u>
Analytes:				
Benzene	ND	ND	15000*	0.5 ug/L
Bromodichloromethane	ND	ND	ND	0.5 ug/L
Bromoform	ND	ND	ND	0.5 ug/L
Bromomethane	ND	ND	ND	0.5 ug/L
n-Butylbenzene	ND	ND	29	0.5 ug/L
sec-Butylbenzene	ND	ND	16	0.5 ug/L
tert-Butylbenzene	ND	ND	ND	0.5 ug/L
Carbon tetrachloride	ND	ND	ND	0.5 ug/L
Chlorobenzene	ND	ND	ND	0.5 ug/L
Chloroethane	ND	ND	ND	0.5 ug/L
Chloroform	ND	ND	ND	0.5 ug/L
Chloromethane	ND	ND	ND	0.5 ug/L
2-Chlorotoluene	ND	ND	ND	0.5 ug/L
4-Chlorotoluene	ND	ND	16	0.5 ug/L
Dibromochloromethane	ND	ND	ND	0.5 ug/L
1,2-Dibromo-3-chloropropane	ND	ND	ND	0.5 ug/L
1,2-Dibromoethane (EDB)	ND	ND	ND	0.5 ug/L
Dibromomethane	ND	ND	ND	0.5 ug/L
1,2- Dichlorobenzene	ND	ND	ND	0.5 ug/L
1,3-Dichlorobenzene	ND	ND	ND	0.5 ug/L
1,4-Dichlorobenzenc	ND	ND	ND	0.5 ug/L
Dichlorodifluoromethane	ND	ND	ND	0.5 ug/L
1,1-Dichloroethane	ND	ND	ND	0.5 ug/L
1,2-Dichloroethane	ND	ND	ND	0.5 ug/L
1,1-Dichloroethene	ND	ND	ND	0.5 ug/L

ND = Not Detected



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/24/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

C-0530

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled:

03/17/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 03/18/03 03/20/03-03/21/03

Practical

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

Sample ID:	<u>MW-6</u>	<u>MW-17</u>	<u>MW-4</u>	Quantitation <u>Limits</u>	<u>Units</u>
Analytes:					
cis-1,2-Dichloroethene	ND	ND	ND	0.5	ug/L
trans-1,2-Dichloroethene	ND	ND	ND	0.5	ug/L
1,2-Dichloropropane	ND	ND	ND	0.5	ug/L
1,3-Dichloropropane	ND	ND	ND	0.5	ug/L
2,2-Dichloropropane	ND	ND	ND	0.5	ug/L
1,1-Dichloropropene	ND	ND	ND	0.5	ug/L
cis-1,3-Dichloropropene	ND	ND	ND	0.5	ug/L
trans-1,3-Dichloropropene	ND	16	ND	0.5	ug/L
Ethylbenzene	ND	ND	450	0.5	ug/L
Hexachlorobutadiene	ND	ND	ND	0.5	ug/L
lsopr opylbezene	ND	ND	24	0.5	ug/L
4-Isopropyltoluene	ND	ND	ND	0.5	ug/L
Methylene chloride	ND	ND	ND	0.5	ug/L
Naphthalene	ND	ND	41	0.5	ug/L
n-Propylbenzene	ND	ND	38	0.5	ug/L
Styrene	ND	ND	ND	0.5	ug/L
1,1,1,2-Tetrachloroethane	ND	ND	ND	0.5	ug/L
1,1,2,2-Tetrachloroethane	ND	ND	ND	0.5	ug/L
Tetrachloroethylene	ND	ND	480	0.5	ug/L
Tolu ene	ND	ND	95	0.5	ug/L
1,2,3-Trichlorobenzene	ND	ND	ND	0.5	ug/L
1,2,4-Trichlorobenzene	ND	ND	ND	0.5	ug/L
I,I,I-Trichloroethane	ND	ND	ND	0.5	ug/L
1,1,2-Trichloroethane	ND	ND	ND	0.5	ug/L
Trichloroethylene	ND	24	170	0.5	ug/L

ND = Not Detected



Testing Laboratories

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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Report Date:

03/24/03

Client Address:

110 Pine Ave., Suite 900

JEL Ref. No.:

C-0530

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled:

03/17/03

Project:

Lynwood Springs

Date Received: Date Analyzed: 03/18/03 03/20/03-03/21/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

Water

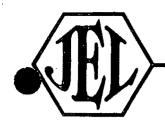
EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

Sample ID:				<u>Practical</u> <u>Quantitation</u> <u>Uni</u> <u>Limits</u>	ts
Analytes:					
Trichlorofluoromethane	ND	ND	ND	0.5 ug/	/L
1,2,3-Trichloropropane	ND	ND	ND	0.5 ug/	/L
1,2,4-Trimethylbenzene	ND	ND	16	0.5 ug/	/L
1,3,5-Trimethylbenzene	13	ND	40	0.5 ug/	/L
Vinyl chloride	ND	ND	ND	0.5 ug/	/L
Xylenes	ND	ND	51	0.5 ug/	/L
MTBE	ND	ND	110000*	0.5 ug/	/L
Ethyl-tert-butylether	ND	ND	71	0.5 ug/	′L
Di-isopropylether	ND	ND	ND	0.5 ug/	/L
tert-amylmethylether	ND	ND	ND	0.5 ug/	′L
tert-Butylalcohol	ND	ND	ND	0.5 ug/	'L
Dilution Factor	1	1	1/500*		
Surrogate Recovery:				QC Limits	
Dibromofluoromethane	97%	97%	107%	60 - 140	
Toluene-d ₈	95%	105%	100%	60 - 140	
4-Bromofluorobenzene	98%	103%	100%	60 - 140	

ND

= Not Detected

= Dilutions for these compound(s); first for all others



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

QUALITY CONTROL INFORMATION

Client:

WINEFIELD & ASSOCIATES, INC.

Client Address: 110 Pine Ave., Suite 900

Long Beach, CA 90802

Attn:

Hector Garcia

Date Sampled: Date Received:

Report Date:

JEL Ref. No.:

03/17/03

03/24/03

C-0530

Project:

Lynwood Springs

Date Analyzed:

03/18/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

03/20/03-03/21/03 Water

EPA 5035B/8260B- Volatile Organics by GC/MS

Sample Spiked: CLEAN WATER

	MS	MSD		Acceptability
<u>Parameter</u>	Recovery (%)	Recovery (%)	RPD	Range (%)
Benzene	94%	93%	1.8%	60 - 140
Chlorobenzene	84%	84%	0.36%	60 - 140
Toluene	82%	80%	3.6%	60 - 140
Trichloroethylene	82%	80%	3.3%	60 - 140
1,1-Dichloroethylene	84%	85%	0.26%	60 - 140

Method Blank = Not Detected

MS = Matrix Spike

MSD = Matrix Spike Duplicate RPD = Relative Percent Difference

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WORLD OIL CORP.

9302 South Garfield Avenue South Gate, CA 90280 3896

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Phone(5	62) 928-0100	Fax(562) 928	<u>-03</u> 91											-	
SITE/STATION #: LYOWOOD										ANA	LYSE	ES F	REQUESTE	ED .	
SITE/STATION ADDRESS: 11600	Long Bea	ch Blva	<i>'</i> .		က္က	5									
12 Lynn	oca CA	BODE	}-] 🖫	74									
CONSULTANT: //inepetd &	Assour	ites	PHONE: (562)	495-5777	Ž	2		- 1							
ADDRESS: 110 UPine;	Denue			10	CONTAINERS	(fullsuk)	V	Ì		[
Long Beach,	CA 9	0802	FAX:(5(06)	445-5877	၂ ပ	0	12			1		- 1			
PROJECT MGH. /VIGH Winefuld	SAMPLER N	AME:	cila Morri	ssen	NUMBER OF	8260B	7 0	- 1		1					
PROJECT # LYN-06-202	PROJECT N	,,	nwood Ja	orings] #	3	3								
TAT: 24Hr 48Hr 72Hr	Normal	(5 Days)	Other(, 0	Ĭ	2	Kmpera				1				
SHIPPED VIA: Walk In Couner	Fed Ex		Other()	Ž	W	12								
SAMPLE IQ	MATRIX	DATE	TIME	LAB ID									RE	MARKS	
MW-24	water	3/17/03	0858	CU530-1	3	X									
1111-23	1	1	0958	CU534-2	3	X									
MW-33			1055	(4534-3	3	X									
MW-13			1209	CU530-4	3	X									
MW-19			1334	CU574-5	3	X									
MW-(0			1550	10530-6	3										
MW-17			1525	CU534-7	3	X									
MW-4	V	V	1657	CU53U-8	13	X									
Temperature Black Le	water	3/18/03	1200	(0530-9	1		X						6.130		
														-	
1) RELINQUISHED BY:			2) RELINQUISHE	D BY:			***************************************			3) RELI	NQUIS	HED	BY:		
Printed Name: Shela K. MOCI	ussey		Printed Name: _						_	Printed I	lame [.]				
Signature Au ak form sen	Date/Time: 3/	18/03 1300	Signature:		D	ate/Ti	me:			Sign	ature:			Date/Time:	
1) RECEIVED BY:	I'		2) RECEIVED BY	:						3) REC	EIVED	BY:			
Printed Name STANK	TUMES		Printed Name							Printed 1	lame:			and the state of t	
Signature.	_Date/Time:	3/14/-3	Signature:		ō	ate/Tu	me:		_	Sign	ature			Date/Time	
1-0-		1320													
		• •	I							l					



24 March 2003

Matthew Winefield Winefield & Associates 110 Pine Ave, Suite 900 Long Beach, CA 90802

RE:Lynwood Springs

Work Order No.: 0303248

Attached are the results of the analyses for samples received by the laboratory on 03/18/03 16:00.

The samples were received by Sierra Analytical Labs, Inc. with a chain of custody record attached or completed at the submittal of the samples.

The analyses were performed according to the prescribed method as outlined by EPA, Standard Methods, and A.S.T.M.

The remaining portions of the samples will be disposed of within 30 days from the date of this report. If you require any additional retaining time, please advise us.

Sincerely,

Richard K. Forsyth

chara 1 Tryl

Laboratory Director



Project. Lynwood Springs

Project Number: LYN-06-202
Project Manager: Matthew Winefield

Reported: 03/24/03 15:08

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-24	0303248-01	Liquid	03/17/03 08:58	03/18/03 16:00
MW-23	0303248-02	Liquid	03/17/03 09:58	03/18/03 16:00
MW-33	0303248-03	Liquid	03/17/03 10:55	03/18/03 16:00
MW-13	0303248-04	Liquid	03/17/03 12:09	03/18/03 16:00
MW-19	0303248-05	Liquid	03/17/03 13:34	03/18/03 16:00
MW-6	0303248-06	Liquid	03/17/03 15:50	03/18/03 16:00
MW-17	0303248-07	Liquid	03/17/03 15:25	03/18/03 16:00
MW-4	0303248-08	Liquid	03/17/03 16:57	03/18/03 16:00



Project Lynwood Springs

Project Number LYN-06-202
Project Manager. Matthew Winefield

Reported: 03/24/03 15:08

Conventional Chemistry Parameters by APHA/EPA Methods Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-24 (0303248-01) Liquid	Sampled: 03/17/03 08:58	Received:	03/18/03	16:00					
Total Alkalinity	1340	0.400	mg/L	1	B3C2008	03/18/03	03/18/03	EPA 310.1	***************************************
Carbonate Alkalinity	ND	0.400	**	**	*	п		"	
Bicarbonate Alkalinity	1340	0.400		*	W	**	#	n	
Hydroxide Alkalinity	ND	0.400	*	*	•	*	*	•	
Biochemical Oxygen Demand	13.0	2.00	n	n	*	Ħ	03/23/03	EPA 405.1	
Carbon dioxide, free	4.40	0.100	41	•	•	**	03/18/03	4500-CO2	H-01
Chemical Oxygen Demand	47.0	0.100	#1	**	*	W	**	EPA 410.4	
Ferrous Iron	ND	1.00	-	#	**		#	SM-3500-FE-D	
Nitrite as N	ND	0.0200	•	*	•	**	*	SM4500-NO2B	
Nitrate as N	1.70	0.0200			Ħ	n	Ħ	EPA 353.3	
Sulfate as SO4	575	0.500	*	n	n	•	*	EPA 375.4	
MW-23 (0303248-02) Liquid	Sampled: 03/17/03 09:58	Received:	03/18/03	16:00					
Total Alkalinity	1120	0.400	mg/L	1	B3C2008	03/18/03	03/18/03	EPA 310.1	
Carbonate Alkalinity	ND	0.400	*	tt		н	n	**	
Bicarbonate Alkalinity	1120	0.400	•	**	11	н	n	Ħ	
roxide Alkalinity	ND	0.400	Ħ	n	*	n	**	₩.	
brochemical Oxygen Demand	32.0	2.00	•	n		*	03/23/03	EPA 405.1	
Carbon dioxide, free	39.6	0.100	Ħ	n	Ħ	•	03/18/03	4500-CO2	H-01
Chemical Oxygen Demand	135	0.100	11	11	n		77	EPA 410.4	
Ferrous Iron	ND	1.00	ŧ	н	**	*	•	SM-3500-FE-D	
Nitrite as N	ND	0.0200	**	π	*		**	SM4500-NO2B	
Nitrate as N	1.00	0.0200			**	*	**	EPA 353.3	
Sulfate as SO4	225	0.500	n		**		**	EPA 375.4	



Project Lynwood Springs

Project Number: LYN-06-202
Project Manager: Matthew Winefield

Reported: 03/24/03 15:08

Conventional Chemistry Parameters by APHA/EPA Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Umts	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-33 (0303248-03) Liquid	Sampled: 03/17/03 10:55	Received:	03/18/03	16:00					.
Total Alkalinity	940	0.400	mg/L	1	B3C2008	03/18/03	03/18/03	EPA 310.1	
Carbonate Alkalinity	ND	0.400	•	77	**	Ħ	•		
Bicarbonate Alkalinity	940	0.400		**	**		*		
Hydroxide Alkalinity	ND	0.400		**	#		*	**	
Biochemical Oxygen Demand	28.0	2.00			**	**	03/23/03	EPA 405.1	
Carbon dioxide, free	48.4	0.100			Ħ	n	03/18/03	4500-CO2	H-01
Chemical Oxygen Demand	125	0.100	*		n	н	•	EPA 410.4	
Ferrous Iron	ND	1.00		n		**		SM-3500-FE-D	
Nitrite as N	ND	0.0200		**	Ħ	**	n	SM4500-NO2B	
Nitrate as N	2.50	0.0200	n	Ħ	**	*	*	EPA 353.3	
Sulfate as SO4	250	0.500	•		•		•	EPA 375.4	
MW-13 (0303248-04) Liquid	Sampled: 03/17/03 12:09	Received:	03/18/03	16:00					
Total Alkalinity	900	0.400	mg/L	1	B3C2008	03/18/03	03/18/03	EPA 310.1	
Carbonate Alkalinity	ND	0.400	Ħ		#	#		Ħ	
Bicarbonate Alkalinity	900	0.400	H				*	n	
roxide Alkalinity	ND	0.400	n	*	•	*	•	n	
hemical Oxygen Demand	8.50	2.00	n		**	н	03/23/03	EPA 405.1	
Carbon dioxide, free	35.2	0.100	n	n		II	03/18/03	4500-CO2	H-01
Chemical Oxygen Demand	30.0	0.100	**		*	*		EPA 410.4	
Ferrous Iron	ND	1.00	**	*	•	H	•	SM-3500-FE-D	
Nitrite as N	ND	0.0200	,,	n	*	Ħ	-	SM4500-NO2B	
Nitrate as N	1.70	0.0200	n	*			•	EPA 353.3	
Sulfate as SO4	625	0.500	**		n	u		EPA 375.4	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Project Lynwood Springs

Project Number: LYN-06-202
Project Manager Matthew Winefield

Reported: 03/24/03 15:08

Conventional Chemistry Parameters by APHA/EPA Methods Sierra Analytical Labs, Inc.

	Result	Reporting	Units	Dilution	David		4	Markad	31
Analyte	Keswi	Limit	Units	ווסמטווען	Batch	Prepared	Analyzed	Method	Notes
MW-19 (0303248-05) Liquid	Sampled: 03/17/03 13:34	Received:	03/18/03	16:00					
Total Alkalinity	1160	0.400	mg/L	1	B3C2008	03/18/03	03/18/03	EPA 310.1	
Carbonate Alkalinity	ND	0.400		**	n		•	*	
Bicarbonate Alkalinity	1160	0.400	*		*	*	*	•	
Hydroxide Alkalinity	ND	0.400	*	,		n	*	*	
Biochemical Oxygen Demand	11.2	2.00		*		**	03/23/03	EPA 405.1	
Carbon dioxide, free	30.8	0.100		*	•	**	03/18/03	4500-CO2	H-01
Chemical Oxygen Demand	42.0	0.100	n	#		17		EPA 410.4	
Ferrous Iron	· ND	1.00	*	*	•	*	Ħ	SM-3500-FE-D	
Nitrite as N	ND	0.0200			n	11	w	SM4500-NO2B	
Nitrate as N	2.40	0.0200	n	7	n	п	Ħ	EPA 353.3	
Sulfate as SO4	150	0.500	=	*	*	p	*	EPA 375.4	
MW-6 (0303248-06) Liquid	Sampled: 03/17/03 15:50	Received: (03/18/03	16:00					
Total Alkalinity	1520	0.400	mg/L	1	B3C2008	03/18/03	03/18/03	EPA 310.1	
Carbonate Alkalinity	ND	0.400	н	n	•	Ħ	•	*	
Bicarbonate Alkalinity	1520	0.400	11	•	Ħ	•	n	n	
roxide Alkalinity	ND	0.400	**	n		#	*	•	
chemical Oxygen Demand	14.6	2.00	•	*	n	*	03/23/03	EPA 405.1	
Carbon dioxide, free	8.80	0.100	•		#	#	03/18/03	4500-CO2	H-01
Chemical Oxygen Demand	51.0	0.100	п	*	#	**	•	EPA 410.4	
Ferrous Iron	ND	1.00	n		Ħ	**	Ħ	SM-3500-FE-D	
Nitrite as N	0.0280	0.0200	n	*	Ħ	n	77	SM4500-NO2B	
Nitrate as N	3.00	0.0200	H		•	n	*	EPA 353.3	
Sulfate as SO4	225	0.500	11	п	Ħ	n	*	EPA 375.4	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Project. Lynwood Springs

Project Number: LYN-06-202
Project Manager Matthew Winefield

Reported: 03/24/03 15:08

Conventional Chemistry Parameters by APHA/EPA Methods Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-17 (0303248-07) Liquid	Sampled: 03/17/03 15:25					Тершен		//icaioo	110123
W-17 (0303246-07) Elquid			U3/10/U3	10:00					
Total Alkalinity	880	0.400	mg/L	1	B3C2008	03/18/03	03/18/03	EPA 310.1	
Carbonate Alkalinity	ND	0.400	н	**	*	**	#	*	
Bicarbonate Alkalinity	880	0.400	ħ	77	п	"		Ħ	
Hydroxide Alkalinity	ND	0.400	n	**	**	7	7	The state of the s	
Biochemical Oxygen Demand	8.00	2.00	M	tr	*	H	03/23/03	EPA 405.1	
Carbon dioxide, free	13.2	0.100		n	#	*	03/18/03	4500-CO2	H-01
Chemical Oxygen Demand	28.0	0.100	π	n	Ħ	н	•	EPA 410.4	
Ferrous Iron	ND	1.00	P	₩	,,	#	•	SM-3500-FE-D	
Nitrite as N	ND	0.0200	n	•	*	**	78	SM4500-NO2B	
Nitrate as N	0.400	0.0200	Ħ	#		tt	*	EPA 353.3	
Sulfate as SO4	500	0.500	n	Ħ	n	e	*	EPA 375.4	
MW-4 (0303248-08) Liquid S	Sampled: 03/17/03 16:57	Received: (03/18/03 1	16:00					
Total Alkalinity	1660	0.400	mg/L	1	B3C2008	03/18/03	03/18/03	EPA 310.1	
Carbonate Alkalinity	ND	0.400	n	*	Ħ	*	*	*	
Bicarbonate Alkalinity	1660	0.400	61		*		n	*	
roxide Alkalinity	ND	0.400	Ħ	Ħ	*	n	*	•	
chemical Oxygen Demand	256	2.00	Ħ	*	#	H	03/23/03	EPA 405.1	
Carbon dioxide, free	26.4	0.100			n	n	03/18/03	4500-CO2	
Chemical Oxygen Demand	920	0.100	11	*	n	n	n	EPA 410.4	
Ferrous Iron	ND	1.00	₩.	**		h	*	SM-3500-FE-D	
Nitrite as N	, ND	0.0200	н	H	n	Ħ	π	SM4500-NO2B	
Nitrate as N	0.380	0.0200	**	Ħ	*	*	**	EPA 353.3	
Sulfate as SO4	200	0.500		•	Ħ		en en	EPA 375.4	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Project. Lynwood Springs

Project Number. LYN-06-202
Project Manager. Matthew Winefield

Reported: 03/24/03 15:08

Miscellaneous Physical/Conventional Chemistry Parameters Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Umts	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-24 (0303248-01) Liquid	Sampled: 03/17/03 08:58	Received	03/18/03	16:00		1			#
Chloride	85.0	0.500	mg/L	1	B3C2008	03/18/03	03/18/03	SM 4500-C1-B	
MW-23 (0303248-02) Liquid	Sampled: 03/17/03 09:58	Received:	03/18/03	16:00					
Chloride	112	0.500	mg/L	1	B3C2008	03/18/03	03/18/03	SM 4500-Cl-B	
MW-33 (0303248-03) Liquid	Sampled: 03/17/03 10:55	Received:	03/18/03	16:00					
Chloride	94.0	0.500	mg/L	l	B3C2008	03/18/03	03/18/03	SM 4500-Cl-B	
MW-13 (0303248-04) Liquid	Sampled: 03/17/03 12:09	Received:	03/18/03	16:00					
Chloride	122	0.500	mg/L	1	B3C2008	03/18/03	03/18/03	SM 4500-C1-B	
MW-19 (0303248-05) Liquid	Sampled: 03/17/03 13:34	Received:	03/18/03	16:00					
Chloride	83.0	0.500	mg/L	1	B3C2008	03/18/03	03/18/03	SM 4500-C1-B	
MW-6 (0303248-06) Liquid	Sampled: 03/17/03 15:50	Received: (03/18/03 1	6:00					
Chloride	64.0	0.500	mg/L	1	B3C2008	03/18/03	03/18/03	SM 4500-C1-B	
'-17 (0303 248-07) Liquid	Sampled: 03/17/03 15:25	Received:	03/18/03	16:00					
Chloride	69.0	0.500	mg/L	1	B3C2008	03/18/03	03/18/03	SM 4500-C1-B	
MW-4 (0303248-08) Liquid	Sampled: 03/17/03 16:57	Received: (03/18/03 1	6:00					
Chloride	109	0.500	mg/L	1	B3C2008	03/18/03	03/18/03	SM 4500-Cl-B	



Project Lynwood Springs

Project Number LYN-06-202
Project Manager Matthew Winefield

Reported: 03/24/03 15:08

Metals by EPA 200 Series Methods Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-24 (0303248-01) Liquid	Sampled: 03/17/03 08:58	Received:	03/18/03	3 16:00					
Calcium	93	0.10	mg/L	1	B3C1923	03/19/03	03/20/03	EPA 200.7	
Potassium	9.3	0.10	81	**	n	*	57	W	
Magnesium	59	0.10	**	**	41	*	03/20/03	•	
Sodium	900	0.50	,,	5	**	Ħ	03/20/03	*	
Lead	0.022	0.020	#1	1	**	n	03/20/03	*	
MW-23 (0303248-02) Liquid	Sampled: 03/17/03 09:58	Received:	03/18/03	3 16:00					
Calcium	180	0.10	mg/L	1	B3C1923	03/19/03	03/20/03	EPA 200.7	
Potassium	13	0.10	n	-	17	*	*	er	
Magnesium	64	0.10	n	π	**	#	03/20/03	n	
Sodium	440	0.10	n		n	н	03/20/03	*	
Lead	ND	0.020	*	*	*		03/20/03	•	
MW-33 (0303248-03) Liquid	Sampled: 03/17/03 10:55	Received:	03/18/03	16:00					
Calcium	150	0.10	mg/L	1	B3C1923	03/19/03	03/20/03	EPA 200.7	
Potassium	11	0.10	**	*	*		π	**	
nesium	54	0.10	*	•	n	p.	03/20/03	•	
	420	0.10	Ħ		tt	#	03/20/03	Ħ	
Lead	ND	0.020	Ħ	H	*		03/20/03	Ħ	
MW-13 (0303248-04) Liquid	Sampled: 03/17/03 12:09	Received:	03/18/03	16:00					
Calcium	180	0.10	mg/L	1	B3C1923	03/19/03	03/20/03	EPA 200.7	
Potassium	14	0.10	н		н	n	*	n	
Magnesium	53	0.10	•	•	**	n	03/20/03	**	
Sodium	620	0.50	*	5			03/20/03	n	
Lea d	ND	0.020	**	1	n	*	03/20/03	π	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Project Lynwood Springs

Project Number: LYN-06-202
Project Manager: Matthew Winefield

Reported: 03/24/03 15:08

Metals by EPA 200 Series Methods Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-19 (0303248-05) Liquid	Sampled: 03/17/03 13:34	Received	: 03/18/03	3 16:00					
Calcium	72	0.10	mg/L]	B3C1923	03/19/03	03/20/03	EPA 200.7	
Potassium	6.7	0.10	*	*	*		•	n	
Magnesium	51	0.10		*	*	11	03/20/03	n	
Sodium	480	0.10	•	•	•	•	03/20/03	71	
Lead	ND	0.020	я	#	Ħ	29	03/20/03	*	
MW-6 (0303248-06) Liquid	Sampled: 03/17/03 15:50	Received:	03/18/03	16:00					
Calcium	140	0.10	mg/L	1	B3C1923	03/19/03	03/20/03	EPA 200.7	
Potassium	4.8	0.10	•	*	Ħ	Ħ	**	#	
Magnesium	120	0.10	**	n	*	*	03/20/03	₹	
Sodium	710	0.50		5	*	n	03/20/03	#	
Lead	ND	0.020	**	1	Ħ	•	03/20/03	ji .	
MW-17 (0303248-07) Liquid	Sampled: 03/17/03 15:25	Received	: 03/18/03	3 16:00					
Calcium	190	0.10	mg/L	1	B3C1923	03/19/03	03/20/03	EPA 200.7	
Potassium	10	0.10		**	*	**	#	m	
ynesium	58	0.10	•	**	**	•	03/20/03	Ħ	
um	510	0.10	н	¥	*	**	03/20/03	*	
Lead	ND	0.020	tı	81	**	Ħ	03/20/03	*	
MW-4 (0303248-08) Liquid	Sampled: 03/17/03 16:57	Received:	03/18/03	16:00					
Calcium	130	0.10	mg/L	1	B3C1923	03/19/03	03/20/03	EPA 200.7	
Potassium	14	0.10		н	Ħ	**	*	Ħ	
Magnesium	49	0.10	Ħ	**	*	Ħ	03/20/03	×	
Sodium	780	0.50	Ħ	5	*	T	03/20/03	*	
Lead	ND	0.020	#	1	**	*	03/20/03	*	



Project. Lynwood Springs

Project Number: LYN-06-202
Project Manager: Matthew Winefield

Reported: 03/24/03 15:08

Methane by Headspace GC-FID Sierra Analytical Labs, Inc.

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-24 (0303248-01) Liquid	Sampled: 03/17/03 08:58	Received:	03/18/03	16:00					
Me thane	ND	5.0	μg/L	1	B3C1928	03/19/03	03/20/03	EPA 8015B	
MW-23 (0303248-02) Liquid	Sampled: 03/17/03 09:58	Received:	03/18/03	16:00					
Methane	26	5.0	μg/L	1	B3C1928	03/19/03	03/20/03	EPA 8015B	
MW-33 (0303248-03) Liquid	Sampled: 03/17/03 10:55	Received:	03/18/03	16:00					
Methane	18	5.0	μg/L	1	B3C1928	03/19/03	03/20/03	EPA 8015B	
MW-13 (0303248-04) Liquid	Sampled: 03/17/03 12:09	Received:	03/18/03	16:00					
Me thane	ND	5.0	μg/L	1	B3C1928	03/19/03	03/20/03	EPA 8015B	
MW-19 (0303248-05) Liquid	Sampled: 03/17/03 13:34	Received:	03/18/03	16:00					
Methane	130	5.0	μg/L	1	B3C1928	03/19/03	03/20/03	EPA 8015B	
MW-6 (0303248-06) Liquid	Sampled: 03/17/03 15:50	Received: (3/18/03 1	6:00					
Methane	ND	5.0	μg/L	1	B3C1928	03/19/03	03/20/03	EPA 8015B	
'-17 (0303 248-07) Liquid	Sampled: 03/17/03 15:25	Received:	03/18/03	16:00					
Methane	20	5.0	μg/L	1	B3C1928	03/19/03	03/20/03	EPA 8015B	_
MW-4 (0303248-08) Liquid	Sampled: 03/17/03 16:57	Received: (3/18/03 1	6:00					
Methane	4100	100	μg/L	20	B3C1928	03/19/03	03/20/03	EPA 8015B	



Project Lynwood Springs

Project Number. LYN-06-202
Project Manager Matthew Winefield

Reported: 03/24/03 15:08

Total Volatile Petroleum Hydrocarbons (TVPH) by GC/FID Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-24 (0303248-01) Liquid San	npled: 03/17/03 08:58	Received:	03/18/03	16:00				······································	
Gasoline Range Hydrocarbons (C4-C12)	51	50	μg/L	1	B3C2003	03/20/03	03/20/03	EPA 8015B	
Surrogate. a.a.a-Trifluorotoluene		94.5 %	70-1	25	н	"	"	"	
MW-23 (0303248-02) Liquid San	npled: 03/17/03 09:58	Received:	03/18/03	16:00					
Gasoline Range Hydrocarbons (C4-C12)	2300	50	μg/L	1	B3C2003	03/20/03	03/20/03	EPA 8015B	
Surrogate a,a,a-Trifluorotoluene		94.5 %	70-1	25	"	н	"	n	
MW-33 (0303248-03) Liquid San	npled: 03/17/03 10:55	Received:	03/18/03	16:00					
Gasoline Range Hydrocarbons (C4-C12)	3000	50	μg/L	1	B3C2003	03/20/03	03/20/03	EPA 8015B	
Surrogate a,a,a-Trifluorotoluene		94.0 %	70-1	25	"	<i>n</i>	"	"	
MW-13 (0303248-04) Liquid San	apled: 03/17/03 12:09	Received:	03/18/03	16:00					
Gasoline Range Hydrocarbons	ND	50	μg/L	1	B3C2003	03/20/03	03/20/03	EPA 8015B	
gate a.a.a-Trifluorotoluene		90.5 %	70-1	25	"	"	"	7	
MW-19 (0303248-05) Liquid San	apled: 03/17/03 13:34	Received:	03/18/03	16:00					
Gasoline Range Hydrocarbons (C4-C12)	4000	50	μg/L	1	B3C2003	03/20/03	03/20/03	EPA 8015B	
Surrogate: a,a,a-Trifluorotoluene		100 %	70-1	25	n	"		"	
MW-6 (0303248-06) Liquid Samp	pled: 03/17/03 15:50 l	Received: 0	3/18/03 1	6:00					
Gasoline Range Hydrocarbons (C4-C12)	ND	50	μg/L	1	B3C2003	03/20/03	03/20/03	EPA 8015B	
Surrogate a,a,a-Trifluorotoluene		86.0 %	70-1	25		"		*	
MW-17 (0303248-07) Liquid San	apled: 03/17/03 15:25	Received:	03/18/03	16:00					
Gasoline Range Hydrocarbons (C4-C12)	ND	50	μg/L	1	B3C2003	03/20/03	03/20/03	EPA 8015B	
Surrogate a.a.a-Trifluorotoluene		89.5 %	70-1	25	m m	n	н		···-

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nefield & Associates 110 Pine Ave, Suite 900 Long Beach CA, 90802 Project: Lynwood Springs

Project Number: LYN-06-202
Project Manager: Matthew Winefield

Reported: 03/24/03 15:08

Total Volatile Petroleum Hydrocarbons (TVPH) by GC/FID

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (0303248-08) Liquid	Sampled: 03/17/03 16:57	Received:	03/18/03	16:00					_
Gasoline Range Hydrocarbon (C4-C12)	ns 32000	500	μg/L	10	B3C2003	03/20/03	03/20/03	EPA 8015B	
Surrogate. a,a,a-Trifluorotolue	ene	83.0 %	70-	125	,	,		,	



nefield & Associates 110 Pine Ave, Suite 900 Long Beach CA, 90802 Project: Lynwood Springs

Project Number: LYN-06-202
Project Manager: Matthew Winefield

Reported: 03/24/03 15:08

Metals by EPA 200 Series Methods - Quality Control

Sierra Analytical Labs, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Lumits	RPD	Limit	Notes
Batch B3C1923 - EPA 200 Series										
Blank (B3C1923-BLK1)				Prepared:	03/19/03	Analyzed	d: 03/20/03			
Calcium	ND	0.10	mg/L							
Lead	ND	0.020	**							
Magnesium	ND	0.10	*							
Potassium	ND	0.10	n							
Sodium	ND	0.10	11							
LCS (B3C1923-BS1)				Prepared:	03/19/03	Analyzed	i: 03/20/03			
Calcium	0.454	0.10	mg/L	20.4	·····	2.23	85-115	<u> </u>		QM-0
Lead	0.420	0.020	tr	0.400		105	85-115			
Magnesium	0.425	0.10	**	20.4		2.08	85-115			QM-0
Potassium	4.54	0.10	•	24.0		18.9	85-115			QM-0:
Sodium	0.434	0.10	•	20.4		2.13	85-115			QM-0
Matrix Spike (B3C1923-MS1)	Sou	arce: 030324	8-01	Prepared:	03/19/03	Analyzed	i: 03/20/03			
un	89.7	0.10	mg/L	20.4	93	NR	70-130			QM-0
	0.423	0.020	n	0.400	0.022	100	70-130			
Magnesium	57.3	0.10	**	20.4	59	NR	70-130			QM-01
Potassium	13.9	0.10	11	24.0	9.3	19.2	70-130			QM-01
Sodium	100000000	0.10	#	20.4	900	NR	70-130			QM-0
Matrix Spike Dup (B3C1923-MSD1)	Sou	ırce: 030324	8-01	Prepared:	03/19/03	Analyzed	i: 03/20/03			
Calcium	91.0	0.10	mg/L	20.4	93	NR	70-130	1.44	20	QM-0
Lead	0.436	0.020	**	0.400	0.022	104	70-130	3.03	20	
Magnesium	56.9	0.10	Ħ	20.4	59	NR	70-130	0.701	20	QM-01
Potassium	14.5	0.10	**	24.0	9.3	21.7	70-130	4.23	20	QM-01
Sodium	1000000000	0.10	**	20.4	900	NR	70-130	0.00	20	OM-01
										•



nefield & Associates 110 Pine Ave, Suite 900 Long Beach CA, 90802 Project. Lynwood Springs

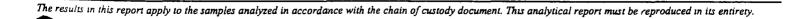
Project Number. LYN-06-202
Project Manager Matthew Winefield

Reported: 03/24/03 15:08

$\label{eq:methane by Headspace GC-FID - Quality Control} \textbf{ Methane by Headspace GC-FID - Quality Control}$

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limut	Notes
Batch B3C1928 - EPA 3810 Headspace										
Biank (B3C1928-BLK1)				Prepared: 0	3/19/03	Analyzed:	03/20/03		•	
Methane	ND	5.0	μg/L		_					
LCS (B3C1928-BS1)				Prepared: 0	3/19/03	Analyzed:	03/20/03			
Methane	54.9	5.0	μg/L	62.5		87.8	80-120			-
Duplicate (B3C1928-DUP1)	Sou	rce: 030324	8-08	Prepared: 0	3/19/03	Analyzed:	03/20/03			
Methane	3920	100	μg/L	,	4100			4.49	30	





inefield & Associates 110 Pine Ave, Suite 900 Long Beach CA, 90802 Project: Lynwood Springs

Project Number: LYN-06-202
Project Manager: Matthew Winefield

Reported: 03/24/03 15:08

Total Volatile Petroleum Hydrocarbons (TVPH) by GC/FID - Quality Control Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Lumit	Notes
Batch B3C2003 - EPA 5030B P & T										
Blank (B3C2003-BLK1)				Prepared	& Analyze	ed: 03/20/	03			
Gasoline Range Hydrocarbons (C4-C12)	ND	50	μg/L							
Surrogate. a.a.a-Trifluorotoluene	16.9	······································	"	20.0		84.5	70-125			
LCS (B3C2003-BS1)				Prepared	& Analyze	ed: 03/20/	03			
Gasoline Range Hydrocarbons (C4-C12)	655	50	μg/L	600	-	109	80-120			
Matrix Spike (B3C2003-MS1)	Sou	ırce: 030326	4-02	Prepared	& Analyze	d: 03/20/	03			
Gasoline Range Hydrocarbons (C4-C12)	485	50	μg/L	600	ND	80.8	50-150			
Matrix Spike Dup (B3C2003-MSD1)	Sou	rce: 030326	4-02	Prepared	& Analyze	xd: 03/20/	03			
Gasoline Range Hydrocarbons (C4-C12)	585	50	μg/L	600	ND	97.5	50-150	18.7	30	····· ··· ···



mefield & Associates 110 Pine Ave, Suite 900 Long Beach CA, 90802 Project: Lynwood Springs
Project Number: LYN-06-202

Project Manager Matthew Winefield

Reported: 03/24/03 15:08

Notes and Definitions

H-01 Sample received without sufficient time to complete analysis within recommended holding time.

QM-01 The spike recovery for this QC sample is outside of established control limits due to sample matrix interference.

DET Analyte DETECTED

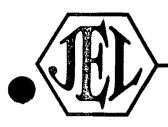
ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

CHAIN OF CUSTODY Analytical Laboratory WORLD OIL CORP. 9302-South-Garfield Avenue South-Gate: CA: 90280-3896 Lab Project: _____ Pg ____ Of ____ --Phone(562) 928-0100 Fax(562) 928-0391 -- 0303248 SITE/STATION #: LYNWOOD Springs SITE/STATION ADDRESS: 11600 Long Beach BIVD ANALYSES REQUESTED SM 4500- CO2 SM 3500-Fe-D RSK -175 (Methane) SM 4500-NO3-D EPA 310.1 (Alkalinily) EPA 405.1 (BCD EPA 410.1 COD EPA 325.3 CHlorida EPA 41. EPA 325.3 C... WHERA 200.700 200.8 I for colourn, a Lunwood, CA SM 4500-NO2-B SM 4500-SO4-E CONSULTANT: Winefield & Associates PHONE: (502) 495-5777 EPA 4010B (lend 110 Pine Avenue ADDRESS: PROJECT MGR. LATTWINEFIELD SAMPLER NAME: Shella Morrissey PROJECT # LYN-C6-207 PROJECT NAME: LUNWOED SPRINGS TAT: 24Hr ABHr 72Hr Normal (5 Days) SHIPPED VIA: Walk in Courtier Fed Ex Other SAMPLE ID MATRIX DATE TIME LAB ID LW-2~ water 3/17/03 0858 0958 02 MW-33 055 03 05 MW-10 657 Temperative Black 7 Temperative Black 8 3/18/03 200 480 1) RELINQUISHED BY: 2) RELINQUISHED BY: 3) RELINQUISHED BY: Printed Name: Sheila K. Morrissey Printed Name: Printed Name: ____ Signature: Total Comisse pate/Time: 3/18/03 Signature: Date/Time: Signature: Date/Time: 1) RECEIVED BY: 2) RECEIVED BY: 3) RECEIVED BY: Printed Name: DEREIC KIEFFER Printed Name: Printed Name: Signature: Date/Time: 3/903 Signature: Date/Time: Signature: Date/Time 16:00



Testing Laboratories

P.O. Box 5387 • Fullerton, CA 92838 (714) 449-9937 • FAX (714) 449-9685

JONES ENVIRONMENTAL

LABORATORY REPORT

Client:
Client Address:

WINEFIELD & ASSOCIATES, INC.

ess: 110 Pine Ave., Suite 900

Long Beach, CA 90802

Report Date: JEL Ref. No.: 03/27/03 B-3691

Client Ref. No.:

LYN-06-202

Attn:

Hector Garcia

Date Sampled: Date Received: 03/21/03

Project:

Lynwood Springs

Date Analyzed:

03/25/03 03/27/03

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Physical State:

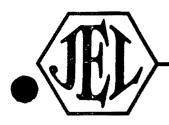
Water

ANALYSES REQUESTED

1. EPA 5035B/8260B- Volatile Organics by GC/MS + Oxygenates

Approval:

Steve Jones, Ph.D. Laboratory Manager



Testing Laboratories

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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client:

WINEFIELD & ASSOCIATES, INC.

Client Address:

110 Pine Ave., Suite 900

Long Beach, CA 90802

Attn: Project:

Lynwood Springs

Project Address:

Hector Garcia

11600 S. Long Beach Blvd., Lynwood, CA

Report Date:

JEL Ref. No.:

Client Ref. No.:

Date Sampled:

Date Received:

03/27/03 B-3691

LYN-06-202

03/21/03

03/25/03

03/27/03

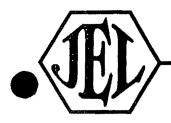
Date Analyzed: **Physical State:**

Water

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

Sample ID:	<u>W&A-</u> <u>MW-1</u>	<u>W&A-</u> <u>MW-2</u>	<u>W&A-</u> <u>MW-3</u>	<u>W&A-</u> <u>MW-4</u>	<u>Practical</u> <u>Quantitation</u> <u>Limits</u>	<u>Units</u>
Analytes:						
Benzene	ND	4.1	ND	ND	0.5	ug/L
Bromodichloromethane	ND	ND	ND	ND	0.5	ug/L
Bromoform	ND	ND	ND	ND	0.5	ug/L
Bromomethane	ND	ND	ND	ND	0.5	ug/L
n-Butylbenzene	ND	ND	ND	ND	0.5	ug/L
sec-Butylbenzene	ND	ND	ND	ND	0.5	ug/L
tert-Butylbenzene	ND	ND	ND	ND	0.5	ug/L
Carbon tetrachloride	ND	ND	ND	ND	0.5	ug/L
Chlorobenzene	ND	ND	ND	ND	0.5	ug/L
Chloroethane	ND	ND	ND	ND	0.5	ug/L
Chloroform	ND	ND	ND	ND	0.5	ug/L
Chloromethane	ND	ND	ND	ND	0.5	ug/L
2-Chlorotoluene	ND	ND	ND	ND	0.5	ug/L
4-Chlorotoluene	ND	ND	ND	ND	0.5	ug/L
Dibiomochloromethane	ND	ND	ND	ND	0.5	ug/L
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	0.5	ug/L
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	0.5	ug/L
Dibromomethane	ND	ND	ND	ND	0.5	ug/L
1.2- Dichlorobenzene	ND	ND	ND	ND	0.5	ug/L
1.3-Dichlorobenzene	ND	ND	ND	ND	0.5	ug/L
1,4-Dichlorobenzenc	ND	ND	ND	ND	0.5	ug/L
Dichlorodifluoromethane	ND	ND	ND	ND	0.5	ug/L
1,1-Dichloroethane	ND	ND	ND	ND	0.5	ug/L
1.2-Dichloroethane	ND	ND	ND	ND	0.5	ug/L
1.1-Dichloroethene	ND	ND	ND	ND	0.5	ug/L

ND = Not Detected



Testing Laboratories

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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client: Client Address: WINEFIELD & ASSOCIATES, INC.

110 Pine Ave., Suite 900

Long Beach, CA 90802

JEL Ref. No.: Client Ref. No.: 03/27/03 B-3691

Report Date:

LYN-06-202

Attn:

Hector Garcia

Date Sampled:

03/21/03

Project:

Lynwood Springs

11600 S. Long Beach Blvd., Lynwood, CA Project Address:

Date Received: Date Analyzed:

03/25/03 03/27/03

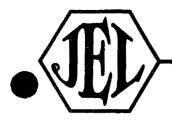
Physical State:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS & Oxygenates

Sample ID:	<u>W&A-</u> <u>MW-1</u>	<u>W&A-</u> <u>MW-2</u>	<u>W&A-</u> <u>MW-3</u>	<u>W&A-</u> <u>MW-4</u>	<u>Practical</u> <u>Quantitation</u> <u>Limits</u>	<u>Units</u>
Analytes:						
cis-1,2-Dichloroethene	ND	ND	17	ND	0.5	ug/L
trans-1,2-Dichloroethene	ND	ND	ND	ND	0.5	ug/L
1,2-Dichloropropane	ND	ND	ND	ND	0.5	ug/L
1,3-Dichloropropane	ND	ND	ND	ND	0.5	ug/L
2,2-Dichloropropane	ND	ND	ND	ND	0.5	ug/L
1,1-Dichloropropene	ND	ND	ND	ND	0.5	ug/L
cis-1,3-Dichloropropene	ND	ND	ND	ND	0.5	ug/L
trans-1,3-Dichloropropene	ND	ND	ND	ND	0.5	ug/L
Ethylbenzene	ND	ND	ND	ND	0.5	ug/L
Hexachlorobutadiene	ND	ND	ND	ND	0.5	ug/L
Isopropylbezene	ND	ND	ND	ND	0.5	ug/L
4-Isopropyltoluene	ND	ND	ND	ND	0.5	ug/L
Methylene chloride	ND	ND	ND	ND	0.5	ug/L
Naphthalen e	ND	ND	ND	ND	0.5	ug/L
'n-Propylbenzene	ND	ND	ND	ND	0.5	ug/L
Styrene	ND	ND	ND	ND	0.5	ug/L
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	0.5	ug/L
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	0.5	ug/L
Tetrachloroethylene	ND	ND	ND	ND	0.5	ug/L
Toluene	ND	ND	ND	ND	0.5	ug/L
1,2,3-Trichlorobenzene	ND	ND	ND	ND	0.5	ug/L
1,2,4-Trichlorobenzene	ND	ND	ND	ND	0.5	ug/L
1,1,1-Trichloroethane	ND	ND	ND	ND	0.5	ug/L
1,1,2-Trichloroethane	ND	ND	ND	ND	0.5	ug/L
Trichloroethylene	ND	26	49	0.8	0.5	ug/L

ND = Not Detected



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JONES ENVIRONMENTAL

LABORATORY RESULTS

Client: Client Address: WINEFIELD & ASSOCIATES, INC.

110 Pine Ave., Suite 900

Long Beach, CA 90802

Attn:

Hector Garcia

Project:

Lynwood Springs

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Report Date:

JEL Ref. No.:

Client Ref. No.:

Date Sampled:

Physical State:

03/27/03 B-3691

LYN-06-202

03/21/03

03/25/03

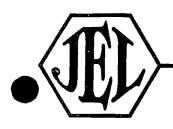
Date Received: 03/27/03 Date Analyzed:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS &

	<u> W&A-</u>	<u> W&A-</u>	<u> W&A-</u>	<u> W&A-</u>	<u>Practical</u>	
Sample ID:	<u>MW-1</u>	<u>MW-2</u>	<u>MW-3</u>	<u>MW-4</u>	Quantitation	<u>Units</u>
					<u>Limits</u>	
Analytes:						
Trichlorofluoromethane	ND	ND	ND	ND	0.5	ug/L
1,2,3-Trichloropropane	ND	ND	ND	ND	0.5	ug/L
1,2,4-Trimethylbenzene	ND	ND	ND	ND	0.5	ug/L
1,3,5-Trimethylbenzene	ND	ND	ND	ND	0.5	ug/L
Vinyl chloride	ND	ND	ND	ND	0.5	ug/L
Xylenes	ND	ND	ND	ND	0.5	ug/L
MTBE	ND	ND	ND	ND	0.5	ug/L
Ethyl-tert-butylether	ND	ND	ND	ND	0.5	ug/L
Di-isopropylether	ND	ND	ND	ND	0.5	ug/L
tert-amylmethylether	ND	ND	ND	ND	0.5	ug/L
tert-Butylalcohol	ND	ND	ND	ND	0.5	ug/L
Dilution Factor	1	1	1	1		
Surrogate Recovery:					QC Limits	
Dibromofluoromethane	109%	103%	103%	107%	60 - 140	
Toluene-d ₈	107%	108%	107%	109%	60 - 140	
4-Bromofluorobenzene	94%	96%	96%	98%	60 - 140	

ND = Not Detected



Testing Laboratories

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JONES ENVIRONMENTAL

QUALITY CONTROL INFORMATION

Client:

WINEFIELD & ASSOCIATES, INC.

Client Address:

110 Pine Ave., Suite 900

Long Beach, CA 90802

Report Date: JEL Ref. No.: 03/27/03

Client Ref. No.:

B-3691

LYN-06-202

Date Sampled: Date Received: 03/21/03

Project:

Attn:

Lynwood Springs

Hector Garcia

Project Address:

11600 S. Long Beach Blvd., Lynwood, CA

Date Analyzed:

03/25/03 03/27/03

Physical State:

Water

EPA 5035B/8260B- Volatile Organics by GC/MS

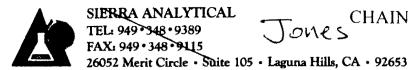
Sample Spiked: MW-1

<u>Parameter</u>	MS Recovery (%)	MSD Recovery (%)	RPD	Acceptability Range (%)
Benzene	103%	102%	1.5%	60 - 140
Chlorobenzene	91%	89%	2.7%	60 - 140
Toluene	90%	90%	0.6%	60 - 140
Trichloroethylene	93%	94%	0.6%	60 - 140
1,1-Dichloroethylene	95%	94%	1.5%	60 - 140

Method Blank = Not Detected

MS = Matrix Spike

= Matrix Spike Duplicate MSD RPD = Relative Percent Difference



Client Winefield & Associates Client Project ID Analysis Requested																		
Chent Address: 110 P	re-Ave	, Ste. 9	00	_ LY.	N-06	-202	2	(7	.									Geotracker EDD Info.
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				Turn Are	arrantad.		24 Hour 72 Hour	2 (4									Client LOGCODE
Client Tel. No: 562 - C	195-4	1777					5 Day	2 6	5									
Client Proj. Mgr.: Watt	Wine	field				Mobile	266	30 12									Site Global ID	
Client Sample ID	Sierra No:	Date	Time	Matrix	Preservative	Container Type	Containers	Ø	12									Field Point Names / Comments
N&. 4-MW-1		3-21-03		water	HCI	VeA	3	X										
W#A-MW-Z-							3	X					ļ					
WGA-MW-3	3						3	X			_							
WEA-MW-4		V		1	1	1	3	メ			_							
Temperative Blank		3-21-03		water	none	VOA	1		X									3.1°C
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Sampler Signature DEJOK	omisse	24_	Shipped Via	Fedi	Ex			Total Number of Containers Sample Disposal:							Sample Disposal:			
Printed Name Sheila K. M	orriss	ed	(Carrier Way)	bill No.3 834	71 - 141	12 - 18	352				_ :	Subm	itted t	o Lat	orat	ory		Return to Client
Relinquished By		Date	Received By	Kase	uP	unce	3/25/0			of sample								☐ Lab Disposal*
Company		Time	Company	100			TUNE 0:46	Cond	litions, u	nless othe determine	rwise a	greed up	ภเกษาเ	ting betwe	en 511 1	RR Land	CHENT	☐ Archive mos
Relinquished By		Date	Received By				Date					Total	Numl	ber of	Con	ntaine	re	Other
Company		Time	Company				Fime							y Lab			13	
4								FO	R LA	BORA	TOI	RY US	E ON	LY - S	Samo	le Rec	eint C	onditions:
Relinquished By							Date	FOR LABORATORY USE ONLY - Sample Receipt Conditions: Chilled - Temp (°C)					1					
Special Instructions		Lime	Company	apadillahara ya 1802			Time	Sample Seals Preservatives - Verified By					1					
Special mountains								Properly Labeled Other Appropriate Sample Container Storage Location										
								U	Appro	priate S	Samp	ole Con	tainer	: ا	Storag	ge Loc	ation	



SIERRA ANALYTICAL TEL: 949 • 348 • 9389 FAX: 949 • 348 • 9115

CHAIN OF CUSTODY RECORD 26052 Merit Circle • Suite 105 • Laguna Hills, CA • 92653

Dates 2 + 1/1	. E Page	<i>i</i> of	<u> </u>
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Lab Work Order No

Client: Windrelde Assected ()				Client Project ID:				Analysis Requested											
Client Address: 1110 Pina LOVA JEAU	Aven	uc. Je	.400	_ 1_	イとん	36-2	52	1.1		1								Geotracker EDD Info:	
	<u>, </u>		4	Turn Arc	ound 🔲 I	mmediate	24 Hour	1											
Client Tel. No: 562 41	<u> 15 - 8</u>	1777		— Time Re	quested.	18 Hour	72 Hour	11.00	2/-	2007								Client LOGCODE	
Client Fax No.:					- 4 Day			41.7	3									Site Global ID	
Client Proj. Mgr.: Mat V	VINE	cla	☐ Normal			Vormal	Mobile	1116	Cars Sala										
Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	Containers	Car contida from										Field Point Names / Comments	
WEY MW-1	···	321.03	1040	Mater		VC A	3	X											
MW-17		·	1138					X											
W41 MW-3		V	C736	1		1	$\downarrow \downarrow$	X											
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	* ***															;			
Sampler Signature DELICAK A	myv.55.	<u>V3.</u>	Shipped Via		Z			Total Number of Containers Sample Disposa							Sample Disposal:				
	loccis	sci4.	(Carner/Wayb	ii №) 83	91-14	62-1	863				Su	bmitt	ed to	Labor	atory	<i>'</i>		Return to Client	
Relinquished By		Date	Received By:				Date	author	nzation t	o perfor	m the ana	yses spe	cified ab	chain of cu pove under ig between:	SIERRA	's Term	s and	☐ Lab Disposal*	
Company.		Time	Company		·		Time-							RA will be				Archivemos.	
Relinquished By		Date	Received By				Date				То	tal N	umbe	er of C	ontai	ners	;	Other	
Сотралу		Time	Company:				Time				Re	ceive	ed by	Labor	atory				
4 Relinquished By	j.	Date	Company: Received By				Date	FOR	LAB	ORA	TORY	USE	ONL		•		-	onditions:	
Company Time Company.					Time	O In						Chi							
Special Instructions					1 11710		Sample Seals				Preservatives - Verified By				fied By				
							Properly Labeled Other Appropriate Sample Container Storage Location												
						~ ^	hhinh			~~~									